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THE LONDON BIRD REPORT

Number 29, 1964



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THE BIRD BOOKS

Published by the Society

THE LONDON NATURAL HISTORY SOCIETY

THE LONDON BIRD REPORT

Edited by F. H. JONES

Assisted by an Editorial Committee consisting of:

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B. A. MARSH

MISS E. P. BROWN

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B. S. Meadows (Recorder for Essex)

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A. D. Tomlins (Recorder for Inner London)

C. E. Wheeler (Recorder for Kent)

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D. I. M. WALLACE

Introduction

ALTHOUGH the team producing the London Bird Report under the chairmanship of R. C. Homes and the editorship of F. H. Jones remains much the same some changes have taken place. It is regretted that ill health has obliged Bryan Sage to reduce his activities although he is still kindly undertaking the duties of Recorder for Hertfordshire, for which the Society and the Ornithological Section are most grateful. It is also regretted that D. I. M. Wallace is leaving the Society's area. The Society owes him a real debt of gratitude for all the work he has put in for it and not least for the admirable drawings he has given so often for the cover of the London Bird Report. It is to be hoped he will continue to be interested in the Society's activities although at a distance. The Society also wishes to thank F. M. Gauntlett for his work as Recorder for Middlesex and Bucks., and to welcome P. J. Oliver who has taken his place. The work of the Recorder for South of the Thames has been divided, B. A. Marsh continuing to act for Surrey while C. E. Wheeler takes over Kent.

The importance of the work of the Recorders, so vital to the production of this Report is unspectacular and may tend to be overlooked. It is also onerous since it is they who have to make enquiries about records. Members are asked to bear in mind the amount of hard work being carried out and the debt of gratitude owed to the Recorders.

The Society and the Section would like to offer their congratulations to R. C. Homes on becoming President of the British Trust for Ornithology for a second term.

A slight, but very welcome, increase in the number of members participating in research projects was noted during the year. This increase, though encouraging, is very small compared with the total membership and it is hoped that more members will take part in what can be a very worthwhile and rewarding undertaking. Conservancy, a prime aim of any natural history society, depends for its effective application upon a precise knowledge of the status of species which can only be obtained, reliably, by members of local societies having an intimate acquaintance of the area in which they operate. Too often support is not forthcoming from the very people who most loudly complain of a lack of effective action. In most cases, although not all, participation in recommended schemes does not entail any additional work other than the submission of reports; much information of great value is obtained during the course of normal bird watching. In other cases, particularly the Common Bird Census, participation calls for a more specialised approach, allied with some perseverance, if satisfactory results are to be obtained.

Full details of current research projects are given on p. 9.

Members are specially asked at all times and particularly when taking part in research projects to take every care not to disturb breeding birds; not only can this have an adverse effect on the birds themselves but it also exposes them to predators.

A paper by Dr. G. Beven on tawny owl pellets is to be found on p. 56 and an account of the bird life of Clapham and Wandsworth Commons by J. Gooders on p. 73. There are also in this issue shorter papers by R. E. F. Peal on Woodpigeons nesting in an unusual site and B. S. Meadows on Black Redstarts in the Lea Valley, two book reviews and a note on the activities of Beddington Ringing station.

ACKNOWLEDGEMENTS

The Records Committee wishes to thank all those who have contributed to this Report and also to welcome new members of the Society. The Editor is most grateful to the members of the Editorial Committee and the Records Committee and especially Messrs. R. C. Homes and B. A. Marsh who were responsible for much of the compilation of the systematic list and to the Recorders. He also wishes to thank Mr. R. E. F. Peal for the loan of the photograph of the Woodpigeon and D. I. M. Wallace for the cover drawing.

Assistance in the exchange of records and information was given freely by the Editors of *British Birds*, D. D. Harber (Secretary to the B.B. Rarities Committee), the officers of the British Trust for Ornithology, the Essex Bird Watching and Preservation Society, the Hertfordshire Natural History Society, the Kent Ornithological Society, the Surrey Bird Club, the Zoological Society of London and the Committee on Bird Sanctuaries in the Royal Parks. Members also have to acknowledge many kindnesses from the Metropolitan Water Board, the London County Council and the Croydon Corporation.

The Year

JANUARY TO MARCH

The 1963-64 winter was generally mild, with only brief spells of severe weather. Consequently London bird-watchers had a rather uneventful time, but those species of birds hard hit by the severe winter of 1962-63 were spared any further heavy losses. The only hard weather movement noted occurred on January 12th and 13th during a period of snow. Lapwings, Skylarks and Starlings were involved but in no spectacular numbers. Following these movements there was a concentration of up to 2,000 Skylarks at Northolt on January 18th. The numbers of most species of duck were smaller than in the previous year, but whether this was due to losses in the hard weather not having been made good, or whether the mild conditions provided more open waters elsewhere is not known.

No rarities at all were seen in this period. For the third year in succession, Little Stints wintered in the Thames estuary at the eastern border of the London Area. Ruffs again wintered at Perry Oaks S.F. and there were winter records from five other localities. There were January reports of Common Sandpiper from Denham, Elmers End S.F. and Beddington S.F. An oiled Red-throated Diver at Walthamstow Reservoir in January may well have been the badly oiled bird found dead at Wanstead Flats on February 11th; there were no other records of divers. A Red-necked Grebe which had been at Queen Mary Reservoir from September 28th, 1963, up to the end of the year, remained until March 10th, and at the same reservoir a Slavonian Grebe stayed from January 26th to February 9th, while another was seen at Aldenham Reservoir from February 8th to 26th. An immature Long-tailed Duck remained at Queen Mary Reservoir from the beginning of the year until March 21st.

Wild geese were scarce, there being only five sightings in January and two in March. Three of these records, however, were of Brent Geese, two on January 10th appropriately at the Brent Reservoir, five at Walton Reservoir on the 11th and six at Swanscombe on March 14th. There were no wild swans. The largest flock of Golden Plover reported was 226 at Shenleybury on February 23rd, and there were up to 1,000 Snipe at Beddington S.F. and up to 1,500 Dunlin at the Thames marshes in Kent and Essex in January. A Glaucous Gull at Charlton G.P. on February 29th and an Iceland Gull at Beckton Level on March 17th and 18th were the only records of these species. A Chiffchaff was seen at Stockers Lake on January 12th during one of the brief cold spells, and one was heard in song at Bexley on February 13th. Other noteworthy species were a Waxwing at Cuffley on January 26th, three Great Grey Shrikes, and two records of Twite. Several observers again commented on the number of Greenfinches in suburban gardens, and in one small garden 110 were trapped between January 4th and February 23rd.

SPRING MOVEMENTS AND THE BREEDING SEASON

The spring migration, like the winter, had few noteworthy features, but did bring two new species to the London Area. On April 17th and 18th, a Red-throated Pipit was present at Staines Reservoir, and on the 25th a Red-rumped Swallow appeared at Ruxley G.P. In this same period Hoopoes were seen at Sevenoaks on the 19th and at Ruxley on the same day as the Red-rumped Swallow. Red-necked Grebes were seen at Holme-thorpe sandpit on April 18th, at Barn Elms Reservoir, on several dates from April 22nd to May 15th, and at Staines Reservoir from May 10th, remaining throughout the rest of the year. An Osprey passed over Rye Meads on May 24th.

The wader passage was on a smaller scale than usual, but shared with other parts of the country an unusual number of Temminck's Stints. In the London Area there was one at Perry Oaks S.F. on May 13th, 16th and 17th, and two there on May 25th and 26th. There was only one record of a Wood Sandpiper and only two of Greenshank. A Black-tailed Godwit was reported at Perry Oaks S.F. on May 10th, and two Stone Curlews were seen flying over, one at Grange Hill on April 7th, and another, the first for Inner London, at Regent's Park on May 8th. There were two adult Little Gulls at Staines on April 17th, and one there from May 3rd to 6th. The passage of Black Terns was on a very small scale, except for a party of 61 at Staines Reservoir on April 27th. Another rarity appeared right at the end of the migration period when a Whiskered Tern, only the second for the Area, was identified at King George VI Reservoir on June 22nd; it remained until the 24th. Crossbills had been present in the Area from the beginning of the year, but reached a peak in April, when there were about 50 at Oxshott. There was no evidence of breeding, and no records at all for June.

1964 was a '“Quail Year”', and passage birds were recorded at Perry Oaks S.F. on May 21st, at Chorley Wood on May 26th and Keston on May 30th. In the valley of the River Darent, however, several birds summered, preferring fields of barley. The first was heard on May 27th and the last on August 12th, but there was no evidence of breeding. There was a further decline in the number of breeding pairs of Herons to 87. As the previous winter was mild, it is possible that the effect of toxic chemicals may be a factor, as has been shown to be the case with some water birds. A pair of Garganey at King George VI Reservoir and Staines Moor from April 11th to May 3rd followed by records of a single drake and later of several birds may indicate that breeding took place in the vicinity. The Sparrowhawk is still declining, and there was no evidence of breeding, but Kestrels appear to be maintaining their numbers. A pair of Ringed Plover nested unsuccessfully at Swanscombe, and another pair summered at Rainham, but evidence of nesting was not obtained. There were probably 23 pairs of Little Ringed Plover, of which 20 are known to have attempted to breed, but only 13 young were known to have reached the flying stage. One pair lost a clutch to a grass snake and another to flooding, a third probably due to the unnatural hazard of egg-collecting. Woodcock were

present in the breeding season in at least eleven localities. Common Terns again summered in the Lea Valley, but evidence of breeding was not conclusive. Collared Doves continue to increase, and bred at Shenfield and Hutton, Heston and Banstead. Kingfishers showed welcome signs of recovery from the effects of the disastrous 1962-63 winter and three pairs are known to have bred, although the nest of one pair was destroyed by vandals. Of other species which suffered severely in that winter, the Green Woodpecker is recovering well in some areas, but is still very scarce in others, the Long-tailed Tit shows signs of increasing in numbers, although few reports of breeding were received, the Wren is making a good recovery, and the Goldcrest is still very scarce with breeding records from only four localities.

For the first time since 1943, no pairs of Woodlark were found in the Area, and there were records from only three localities. Stonechats were absent during the breeding season, although there were scattered records at other times. The Whinchat appears to be decreasing as a breeding species and the population of the Nightingale is still low. Four pairs of Grey Wagtails are known to have bred, and the Red-backed Shrike maintained its numbers. Grasshopper Warblers showed a considerable increase. Eleven pairs of Black Redstarts are known to have bred, and there were at least eleven other singing males. Due to the rebuilding in the City, only one pair bred at Cripplegate, but pairs bred across the River Thames in Southwark and at the White City. Three pairs bred at the regular site at Croydon Power Station, and one pair at Kingston Power Station. In a survey of the lower reaches of the Lea Valley, four breeding pairs and another six singing males were located. A Marsh Warbler in full song was present at Sevenoaks on several dates in May, June and July. In Inner London a pair of Jays nested on an external pipe of a house only 12 feet above the pavement.

AUTUMN MOVEMENTS AND THE BEGINNING OF WINTER

The autumn passage again produced several rare species. A Melodious Warbler at Navestock on August 10th was the second for the London Area, there was an Aquatic Warbler at Sevenoaks on August 21st and near the end of the migration period, a Greenish Warbler, the second for the Area, was identified in allotments at Dollis Hill. A Pectoral Sandpiper was seen at Perry Oaks S.F. on the early date of July 19th. An immature White-winged Black Tern stayed at Staines Reservoir from August 16th to 23rd and another was seen at King George VI Reservoir on September 13th.

Interesting occurrences in July were 27 Common Scoters at Staines which flew in from the east in the morning and left to the west in the evening, a Corncrake at Beddington from the 16th to the end of the month, two Roseate Terns at Sevenoaks on the 11th, and a Short-eared Owl at Chertsey on the 22nd.

The main wader movements occurred in August, but were not as spectacular as in some seasons. The largest party of any species was

225 Ringed Plover at Rainham on the 14th. Scarcer species seen included a Grey Plover on the 14th, a Black-tailed Godwit on the 18th, a Bar-tailed Godwit on the 23rd, and a Grey Phalarope at Rainham on the 18th. A Curlew Sandpiper at Hilfield Reservoir on the 30th was the only record of this species during the year. A Buzzard was seen over Morden Hall Park on August 27th and at least three Quail at Perry Oaks S.F. on the 2nd. There was a small peak of Black Terns in the third week of August, while the largest numbers of Common/Arctic Terns occurred on August 13th with a total of 104 at four localities. Several Little Gulls were seen in August, September and October, and a further small peak of Black Terns occurred on September 13th, when 30 were seen at King George VI Reservoir. Another Quail was seen at King George V Reservoir on September 10th, another Corncrake at Walthamstow on September 22nd was ringed and photographed, and two Bar-tailed Godwits were seen at Rye Meads on September 12th. The only skua reported during the year was an Arctic Skua at Barn Elms Reservoir on September 9th. During daily watches throughout the autumn at Staines the remarkable total of 87 Sandwich Terns were seen, the maximum on any one day being 38 on September 24th. An unusual September record was of a Razorbill diving and swimming upstream on the River Thames at Chiswick on September 2nd. An immature male Ring Ouzel was seen at Ruxley on October 3rd, and a Grey Plover at King George VI Reservoir on October 25th.

The first Redwings appeared on September 20th, but the main movements took place in the second half of October, particularly the 18th and 19th. The 19th was in fact the peak of the autumn immigration for several species, including Skylark, Starling and Chaffinch. Further passage of Starlings took place on the 21st and of Chaffinches on the 25th. On the latter date and on the 28th the main movement of Fieldfares took place, but numbers were not large. The highest number of Mute Swans counted during the year were on the Thames between Putney and Barnes on October 18th, but the number, 183, is well below the population of a few years ago. Crossbills were again reported from July onwards but numbers were smaller than in the first half of the year, and none were seen in December.

Late Swallows were noted on November 2nd and 21st, but much more remarkable was a Swift seen hawking at roof-top level at Eaton Place, Belgravia, on November 26th.

Great Grey Shrikes were seen on October 25th and December 23rd. Bearded Tits irrupted into the Area for the sixth year in succession and were reported from five localities. Several Snow Buntings were seen in November and December.

Two Slavonian Grebes were seen in November and a Red-necked Grebe at Hilfield Reservoir on December 25th. Wild geese were noted on three dates, including three very wild Grey Lags at Hilfield Reservoir on December 18th. There were two Whooper Swans at Hornchurch Chase on November 29th and certain or probable Bewick's Swans at Hilfield Reservoir from November 1st to 7th, Ruislip Reservoir on December 28th and Stockers Lake on December 31st. Six Velvet Scoters remained at Queen

Mary Reservoir from October 29th to November 4th and smaller numbers to the end of the year, and one was seen at Staines on December 20th. A Ferruginous Duck first seen at King George VI Reservoir on December 19th was still there on the 31st. There was an influx of duck in the last ten days of the year, perhaps influenced by the brief cold spell, but numbers were well below those of the 1962-63 winter for most species, although Teal were at a high level with 1,225 at King George VI Reservoir on December 24th, and there were 75 Goldeneye at Staines Reservoir on the same day. The influence of the brief cold spell on Lapwings was not apparent until the 25th, when a movement to S. and S.W. began, reaching a peak on the 27th when many thousands must have been involved, and ending on the 29th. A few Golden Plover were noted on the 27th. Small numbers of Skylarks took part in the movement on the 25th and 27th and Redwings on the 27th.

A Long-eared Owl at South Weald Park on December 12th and 13th was the sole record for the year. A Leach's Petrel was identified at Staines Reservoir on November 29th and a Storm Petrel at King George V Reservoir on December 25th. Wader records of interest were a Purple Sandpiper at Queen Mary Reservoir on November 4th and *c.* 150 Knot flying over King George VI Reservoir on November 28th. The most remarkable record, however, was a Pectoral Sandpiper at Harefield Moor on December 29th, which unfortunately was found dead on January 2nd, 1965.

Recording Arrangements

THE Society's Area is bounded by a circle of 20 miles radius centred on St. Paul's Cathedral. The recorders welcome records from members and non-members. It will assist the speedy entering of records if the following points are observed.

1. Please enter records on the Society's record sheets, which may be obtained from the recorders, in Wetmore Order (as used in the London Bird Report). Use separate sheets for each county (except Bucks to be included with Middlesex) and for Inner London, and send them to the appropriate address below, in August for the period January to July, in November for the period August to October, and the beginning of January for November and December. Please give locality names accurately with map reference in any difficult or doubtful case.
2. Please submit copies of field notes for all species indicated below. It would greatly assist the recorders if these supporting notes were written on separate sheets of paper for each species and attached to the appropriate record sheet. If the species is one which should be considered by the *British Birds* Rarities Committee (see list in *British Birds*, Vol. 57, No. 7, July 1964, pages 280-281) please submit your notes to that Committee as soon as possible, and send the recorder a copy, advising him that the record has been sent to *B.B.* Do not wait until you submit your record sheets.

All rare species	All Gulls of irregular occurrence including Glaucous Gull, Iceland Gull, Little Gull and Kittiwake
All out of season Migrants	Terns of irregular occurrence
All Divers	All Auks
Grebes other than Great Crested and Little	Collared Dove
All Petrels and Shearwaters	Long-eared Owl, Short-eared Owl
Gannet and Shag	Wryneck
Hérons other than Common Heron	Willow Tit away from regular haunts
All Bitterns	Ring Ouzel
Scaup, Ferruginous Duck, Long-tailed Duck	Unusual Warblers
All Geese	Firecrest
Whooper and Bewick's Swans	Races of <i>Anthus spinoletta</i> other than <i>petrosus</i> (Rock Pipit)
All birds of prey except Kestrel	White Wagtail in autumn
Quail	Races or mutants of <i>Motacilla flava</i> other than typical <i>flavissima</i> (Yellow Wagtail)
Rails and Crakes, except Water Rail, Moorhen and Coot	Waxwing
All waders of irregular occurrence, and in addition Whimbrel, Godwits, Wood Sandpiper, Spotted Redshank, Temminck's Stint, Phalaropes	Shrikes other than Red-backed Shrike
All Skuas	Twite, Crossbill, Cirl Bunting, Lapland Bunting, Snow Bunting

Records of the above species are currently considered by the Records Committee before being accepted for publication in the *London Bird Report*. All records published in the Systematic List must stand the scrutiny not only of readers today but also of those who may refer to the *L.B.R.* in the future, all of whom have the right to presume that records are based entirely on correct identification supported by evidence.

The Records Committee wish to thank all who already send in records and invite those who have not contributed to do so, thereby helping to make the *L.B.R.* a comprehensive account of the ornithology of London.

Recorders

Inner London	...	...	...	A. D. TOMLINS, 29 Gerard Road, Barnes, S.W.13.
North of the Thames	...	...	...	c/o B. L. SAGE, 11 Deepdene, Potters Bar, Middlesex.
Bucks. and Middx.	...	...	...	P. J. OLIVER
Essex	...	...	...	B. S. MEADOWS
Herts.	...	...	...	B. L. SAGE
Surrey	...	...	...	B. A. MARSH, 19 Grasmere Avenue, Kingston Vale, S.W.15.
Kent	...	...	...	C. E. WHEELER, 3 Woodhurst Close, Cuxton, Rochester, Kent.

NOTE: Records from the River Thames should be treated as occurring in the county bordering the river to the South, i.e. in Surrey or Kent.

Research Projects

Rubbish Tips

Volunteers are required who are willing to count gulls visiting such tips, especially during the months of November, December, January and February. Much valuable information has come out of this enquiry, now in its fourth year, but more is needed. Offers please to:

A. GIBBS, 271 Great North Way, Hendon, N.W.4.

Swifts and House Martins

This is an enquiry to trace the inner breeding limits of these two easily observed species. It is probable that in most parts of London the inner limits of both Swifts and House Martins lie inside a circle of ten miles' radius from St. Paul's. All records are wanted of birds frequenting possible breeding sites within this range, with particular emphasis on maximum numbers seen at one time in May and June. For Swifts watch should be kept for entry under the eaves of houses, and for House Martins the number of nests should be given with details of occupation when possible. Please get in touch with the organizer:

J. GOODERS, 1 Gorst Road, S.W.11.

B.T.O. Common Birds Census

This Census is already producing worthwhile results on a national level, but the London area is sadly under-represented and additional observers are urgently required. The method is to take breeding season censuses of birds in a variety of habitats, involving a minimum of six to eight visits between March 15th and June 15th. Assistance will be welcomed for any type of habitat, provided that on agricultural land the area studied is not less than 200 acres. Woodland areas, and other habitats, should be from 20-50 acres depending on the density of the cover. Please get in touch with:

JOHN CRUDASS, 4 Grange Grove, Canonbury, N.1 (CAN. 7466).

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 D. D. Lees
 A. Leutscher
 E. T. Levy
 Miss A. Lightfoot (ALt)
 J. Lines
 R. J. Linford
 L. Linley-Howlett (LL-H)
 Dr. L. Lloyd-Evans
 (LL-E)
 T. Lloyd-Evans (TL-E)
 P. B. Lowe
 I. B. McWilton
 H. J. Mackett
 J. D. Magee
 I. G. Manklow
 L. B. Mansen
 F. F. B. Martin
 J. Martin
 B. A. Marsh
 B. S. Meadows (BSMs)
 W. G. Meadows
 P. Meredith
 A. B. M. Mills
 E. Milne-Redhead
 (EM-R)
 A. F. Mitchell
 K. D. G. Mitchell
 S. Mitchell
 G. Molony
 D. S. Montier
 G. Mountford (GMd)
 P. A. Moxey
 Miss M. Munro
 A. F. Musselwhite
 (AFMe)
 B. S. Musselwhite
 P. F. Nicholls
 K. Noble
 R. Norman
- C. Nugent
 B. V. M. O'Brien
 M. J. Offen
 M. Ogle
 C. Ogston
 P. J. Oliver
 A. Paine
 K. H. Palmer
 A. C. Parker
 D. Parr
 A. C. Parsons (ACPr)
 C. H. F. Parsons
 Mrs. E. Peal
 R. E. F. Peal
 D. C. Pegram
 R. W. Peters
 E. Phillips-Jones (EP-J)
 B. P. Pickess
 Mrs. B. Poloniecka
 R. F. Porter
 H. E. Pounds
 A. D. Prowse
 R. J. Prytherch
 D. A. Putman
 Mrs. H. M. Rait-Kerr
 (HMR-K)
 Miss H. Reed
 F. C. Reeves
 E. W. Reuthe
 B. A. Richards
 L. Riddick (LRk)
 Mrs. L. Riddick
 F. Riley
 J. N. Roberts
 L. Roberts (LRs)
 Mrs. W. Roberts
 M. Rogers (MRs)
 Romford Ringing Stn.
 M. N. Rossor
 M. Rothwell
 P. F. C. Rumsey
 W. Rutledge (WRe)
 Rye Meads Ringing
 Group (RMRG)
 B. L. Sage
 R. St. John
 H. G. Samways
 R. F. Sanderson

J. A. Sayer	W. E. Sull	Professor E. H.
C. E. Sewell (CESI)	B. J. Summerfield	Warmington
D. Shepherd	M. Sutton	G. J. Walker
Miss E. M. Sheen	A. R. Tanner	P. M. Washer
A. P. Simes	Miss M. H. Taylor	D. Washington
L. E. Simms	M. P. Taylor	C. E. Wheeler
L. M. Simmonds	M. Thain	C. A. White
Mrs. L. Slader	B. G. Thompson	R. V. White
L. M. P. Small	D. A. Todd	Mrs. M. J. Wicking
Mrs. L. M. P. Small	W. Towler	Miss C. R. Widdowson
(LMPSI)	F. R. Trevatt	A. Wilkins
A. Smith	F. R. Trust (FRt)	J. Willats
P. M. Solly	G. Tyack	A. J. Wills
J. E. S. Souster	Mrs. B. Unsworth	K. Wilson
A. Spain (ASn)	E. Venis	D. E. L. Wimpress
F. J. Speakman	C. M. Veysey	F. Wolff
B. Spiller	P. Vines	M. W. Woodcock
Miss J. M. Stainton	D. I. M. Wallace	A. D. Woodfield
P. Stockwell	Mrs. M. Ward	P. Wood
P. J. Strangeman (PJSn)	D. S. Warren	Miss D. E. Woods
C. E. Storey	R. B. Warren	S. D. Wratten

Birds of the London Area, 1964

A REPORT OF THE BIRD LIFE WITHIN TWENTY MILES OF ST. PAUL'S CATHEDRAL

THIS report follows the British Ornithologists' Union's "Check-List of the Birds of Great Britain and Ireland" (1952) based on the Wetmore classification, and the numbers preceding each species refer to that List where the full scientific name will be found. The vernacular names are those adopted by the Editors of *British Birds* magazine as announced in January, 1953 (*B.B.*, 46: 1).

All records are for 1964 except where otherwise stated. The initials following each record refer to the observer(s) responsible for it, whose name(s) may be obtained by reference to the list of contributors on page 10.

The six counties within the circle of twenty miles radius are indicated by their initials, *viz.*:—E = Essex; H = Herts.; M = Middlesex; B = Bucks.; K = Kent; S = Surrey. Several of the Lea Valley reservoirs are partly in Middlesex, but all records referring to them are published under Essex, following the policy adopted by W. E. Glegg in his histories of the birds of Essex (1929) and Middlesex (1935). The following abbreviations are also used:—*B.B.* = *British Birds* magazine; *E.B.R.* = *Essex Bird Report*; *L.B.R.* = *London Bird Report*; G.P. = gravel pit; Res. = reservoir; S.F. = sewage farm; N., E., S., and W., are used for the cardinal points of the compass, but are intended only to indicate the general direction of flight; mo = many observers.

An open map of the London Area will be found useful for a full appreciation of many of the records. As the history of some of the species is intended to be continuous, reference to the Society's book *The Birds of the London Area* and to the systematic list of previous issues of the *L.B.R.* is recommended.

4 Red-throated Diver

E Walthamstow Res., one from Jan. 18th to 24th (JF, RFSa). This may have been the bird which was found dead, badly oiled, at Wanstead Flats on Feb. 11th (LS petAL). X

5 Great Crested Grebe

In both the winters of 1963-64 and 1964-65 there were no very large flocks, though there seems to have been some recovery in the last of these winters. Thus in 1963-64 the highest total on the wildfowl count dates was 411 in October, whereas in 1964-65 there were 584 in September and, excluding Staines, 504 in October and 486 in November. As there were 300 + at Staines on Nov. 28th this suggests much higher figures than the year before. The largest gatherings reported in 1964, apart from the Staines one already mentioned, were 250 at Queen Mary Res. on Jan. 18th and 170 on

Sept. 13th, 160 at King George VI Res. on Oct. 18th and 120 at Walton Res. on Nov. 25th. As a census is being taken in the breeding season in 1965 details of breeding records are omitted this year, except for the following Inner London record. Regent's Park, a pair in June and July started two nesting sites before settling on a third. According to the birdkeeper eggs were laid but were stolen (RCG, DIMW).

6 Red-necked Grebe

- H Hilfield Park Res., one on Dec. 25th (ASK).
 M Queen Mary Res., the bird which was first seen on Sept. 28th, 1963, (*L.B.R.*, 28: 13) remained until Mar. 10th (BEC). One on six dates from Nov. 4th (BEC) to Dec. 28th (JBC, SG, MDK). Staines Res., one at first in summer plumage from May 10th until the end of the year (JBC *et al.*). On several dates in Nov. and Dec. the birds at the two reservoirs were seen on the same day so were definitely different.
 S Barn Elms Res., one from Apr. 22nd (DCB, PFN, PJSn) to May 15th (MC). Holmethorpe sandpits, one on Apr. 18th (DW) may well have been the one seen later at Barn Elms.

7 Slavonian Grebe

- E King George V Res., one on Nov. 15th (JCE).
 H Aldenham Res., one from Feb. 8th to 28th (ASK, EHW).
 M Queen Mary Res., one from Jan. 26th (ACC, SG) to Feb. 9th (SG). Staines Res., one on Nov. 29th (MAH).

8 Black-necked Grebe

- E Girling Res., one on July 5th and from Sept. 5th to Nov. 8th (RTB, JCE, JF). King George V Res., two on May 28th (JCE). Nazeing G.P., one on May 11th (BSMs).
 M Brent Res., two on Aug. 10th (LAB, PEF, MDK). King George VI Res., one May 2nd-3rd (JBC, CMV). Staines Res., two from May 15th to 27th (JBC, CMV, PC, PAD), one on June 3rd and 6th and two from 7th to 13th, then one again at King George VI Res. from 17th to 23rd (JBC). The first autumn bird was on July 28th (BEC) and during the next three months there was a maximum of six, the last one being seen on Nov. 28th.

9 Little Grebe

It is obvious that not all observers trouble to record this species and certain or probable breeding was reported from only nineteen localities—five Essex, two Herts., two Middlesex, three Kent and seven Surrey. Once again no large autumn or winter flocks were reported, the largest being one of 17 at Rye Meads in October. All records of breeding or flocking would be welcome. Unusual reports include two on Clapham Common from Nov. 21st to 29th and one on Dec. 3rd (MB) and 14 on the Thames, near Kew Gardens, on Dec. 28th (WRI).

12 Leach's Petrel

M Staines Res., one on Nov. 29th (JBC, CMV).

14 Storm Petrel

E King George V Res., one on Dec. 25th (JF).

28 Cormorant

The numbers wintering appear to be slightly down, the largest gathering being of *c.* 60 at Queen Elizabeth II Res., on Feb. 11th (WRI). They are reported to use the towers at this new reservoir for roosting. Elsewhere much smaller numbers, with the usual reports of a few in flight away from the reservoirs, *e.g.* three over Harold Wood on Apr. 10th, three at Broomfield Park on the 17th, five records of one to two in Inner London including two spring ones on Mar. 25th and Apr. 21st, also another end-March record at Barn Elms from the 27th to 29th. Three records from Sevenoaks, where there was a young bird May 18th-19th, a juvenile from Aug. 31st to Sept. 27th and a party of nine flying over N.E. on Nov. 3rd (JGH, JMH). At least two summered at Staines Res.

30 Heron

There was a further fall in the number of occupied nests to not less than 87, which prompts the question whether this is still a result of the mortality in early 1963 or whether it is a reflection of the effect of toxic chemicals, which have been shown to be increasingly affecting some water birds.

E Walthamstow Res., 34 occupied nests (AG).

M Kempton Park, 47 occupied nests (EMG). The largest gatherings in the Area were at King George VI Res. (*c.* 30 on Aug. 3rd) and at Sunbury Res. (up to 32 in the last quarter).

K Farningham, three frequented a cabbage patch between Oct. and Dec. (RVW).

S Gatton Park, six occupied nests and two dead Herons found (HB, AME). dw reported eight nests occupied on Mar. 30th.

DUCKS

As in previous years summaries based largely on the wildfowl counts are given in heavy type and embrace the winters of 1963-64 and 1964-65 rather than the calendar years, in order to give the picture for complete winters. The dates of the monthly counts in winter were as follows:—

1963-64	Oct. 13	Nov. 17	Dec. 15	Jan. 12	Feb. 16	Mar. 15
1964-65	Oct. 18	Nov. 15	Dec. 13	Jan. 17	Feb. 14	Mar. 14

Unusually mild conditions have resulted in a dropping off from the high level of 1962-63, though it is impossible to say how far the exceptional severity of early 1963 may be directly or indirectly responsible for this. The chief feature of the 1964-65 winter was the

almost simultaneous influx of large numbers of most species of wildfowl in the last ten days of December, following very low numbers previously. Many of the newcomers seem to have passed on before the count in mid-January and the flocks that stayed dwindled rather earlier than usual.

Mandarin

As all records have been given in full for the last few years only those involving breeding or more than two birds are detailed now:—

- K Lullingstone, seven on Oct. 19th (AWB).
- S Cobham, a duck with seven young on R. Wey on June 14th, Silvermere, five on Sept. 21st. Weybridge, 10 flew S.E. at dusk on Sept. 7th. Foxwarren Park, two pairs on Oct. 16th (GHG).

45 Mallard

The suggestion of a recovery in the wintering population of Mallard (*L.B.R.*, 28: 16-17) has not been borne out, and the average for Nov. 1964-Feb. 1965 on the monthly wildfowl counts, calculated as in previous years, shows a drop of about 5% compared with the winter of 1963-64. There was less evidence of a mid-winter influx, and the highest count of 5,121 in December compares with peaks of 5,503 in 1963-64, 7,068 in 1962-63 and 6,036 in 1961-62. It should be stressed once again that these figures refer only to the monthly counts and to the waters listed in previous papers on the counts. The averages are, however, very good indications over a period of years of the trend. Away from the selected waters, there were about a thousand Mallard on six other waters counted in October, and there is at times a quite large gathering at Hilfield Park Reservoir, where there were 506 on Dec. 13th, 1964, and 925 on Jan. 17th, 1965. As a result of the absence of any prolonged frost in the winter of 1964-65 the numbers on the Thames between Putney and Teddington did not approach the high levels of January, 1964, (*op. cit.*), but even so there were 1,779 in November and 1,807 in December.

46 Teal

Once again the number of wintering Teal was at a high level compared with the winters from 1957-58 to 1960-61. The average for the months of Nov. 1964-Feb. 1965 was 868, whereas the previous highest average was 887 in 1962-63. Moreover, the highest monthly count of 1,252 on Jan. 17th, 1965, has only once been exceeded—1,304 in Jan. 1962.

Details of spring or summer records of interest and of all flocks over 300 follow:—

- M King George VI Res., 468 on Jan. 12th, c. 300 on Feb. 9th and 340

on the 16th, 300 plus on Nov. 14th and no less than 1,255 counted by JBC on Dec. 24th. One pair summered.

- S Barn Elms Res., 330 on Jan. 11th. A small flock remained well into April, *e.g.* 70 on 7th, 25 on 11th, and the last were two on the 26th. Queen Elizabeth II Res., 451 on Feb. 16th. Weybridge, a pair on R. Wey on Apr. 21st.

47 Garganey

- H Hilfield Park Res., one on Sept. 27th (ASK). Maple Cross G.P., one on June 26th and Aug. 10th (BPP). Old Parkbury G.P., one on Aug. 27th (EHW).
- M Ashford G.P., one on Aug. 26th (BEC, PC). King George VI Res., and Staines Moor, a pair from Apr. 11th (CMV) to May 3rd (JBC, DGH, CMV), a drake to mid-June (JBC, DGH) and one on July 28th (BEC). Staines Res., six on July 27th (JBC, MC) and five on Aug. 10th (JBC). This series of records strongly suggests breeding in the vicinity.
- K Sevenoaks G.P., a duck on July 26th (JGH, JMH).
- S Weybridge, a drake on Apr. 22nd (GHG).

49 Gadwall

- E Hainault Lake, two ducks on Sept. 21st (KN).
- H Aldenham Res., a pair from Feb. 1st to Mar. 6th (ASK). Broxbourne G.P., a pair on five dates from Jan. 12th to Mar. 15th (PRJA, RAB). Hilfield Park Res., a drake on Jan. 25th and a pair on Feb. 1st-2nd and Mar. 1st and 8th (ASK, GCG, BLS), one on Oct. 3rd and Dec. 28th (EHW). Rye Meads, three on Feb. 9th, a pair on Feb. 23rd and Mar. 19th and three on the 30th (RMRG). Stockers Lake, a pair on Dec. 31st (JRB, MNR).
- M Brent Res., one on Jan. 22nd (PEF), three on Feb. 20th (LAB, PEF) and up to nine from Aug. 14th to Sept. 20th (LAB). King George VI Res., six on Dec. 19th (JBC). Queen Mary Res., one on Jan. 17th (BEC). Staines Res., a drake on Jan. 5th (IRB), a duck on Aug. 12th (RWG) and a pair from Dec. 20th to 29th (RWA, JBC). Nr. Twickenham Station, one in flight on Apr. 27th (NJH). Inner London: St. James's Park, a full-winged drake on Mar. 27th and Apr. 22nd (ABMM).
- K Sevenoaks G.P., a duck in December (JGH, JMH).
- S Barn Elms Res., the largest number in the early part of the year was 18 on Jan. 11th (SG); up to 12 in April, a drake and four ducks on May 26th, two pairs on June 6th, and a drake and two ducks on July 5th (JMS). The maximum in the second half of the year was 28 on Dec. 20th (RWA). Richmond Park, seven on Sept. 26th and ten on Oct. 10th and 25th (DLB, AJC, CES).

50 Wigeon

The average of 129 on the wildfowl counts in the winter of 1964-65 showed little change from the low level of the previous winter, when it was 137.

Maxima on the reservoirs in the first quarter of 1964 were as follows:— Barn Elms, 26 on Jan. 11th; Hilfield Park, 32 on Mar. 15th; King George VI, 110 on Feb. 16th; Walton, 40 on Jan. 12th; Staines, 130 on Jan. 4th. A pair was seen at Staines on May 18th, and again in June, and one was flushed at Hersham S.F. on Aug. 15th. At the end of the year the largest numbers were 125 at Barn Elms on Dec. 6th, 179 at Staines on the 26th, *c.* 50 at Hilfield Park on the 28th and 57 at Walton on the 29th. Inner London: Regent's Park, a pair on Jan. 4th and 18th. Thames, two drakes flying over the river at Millbank in a snowstorm on Jan. 14th.

52 Pintail

- H Hilfield Park Res., up to three from Feb. 1st to 6th, one on Dec. 5th-6th and two on the 12th. Rye Meads, two pairs on Mar. 30th, of which one stayed to Apr. 8th. Stockers Lake, two drakes on Dec. 25th.
- M Harefield Moor, a duck on Dec. 27th. King George VI Res., one on Sept. 24th. Queen Mary Res., 12 on Feb. 2nd (jbc), one on Sept. 24th and three on Dec. 20th.
- K Ruxley G.P., a duck Apr. 11th-12th. Sevenoaks G.P., a drake on Jan. 14th and a duck on the 19th, a pair on Dec. 16th and two drakes on the 20th. Sundridge G.P., a drake on Jan. 6th and 9th. Swanscombe, three on Feb. 9th and four on Mar. 14th.
- S Barn Elms Res., a drake on Jan. 5th. Richmond Park, 12 flew round and nine stayed for a couple of hours on Nov. 7th (DLB, CES). Waddon Ponds, a drake, probably an escape, was present from Feb. 1st for several months and may have been the same bird as one at Beddington S.F. from Apr. 15th to 26th and at Carshalton Pond on May 18th.

53 Shoveler

Numbers on the wildfowl counts for 1964-65 were very similar to those in the previous winter, the highest count being 91.

In the first three months of 1964 the largest parties were of 19 at King George V Res. on Jan. 12th and 35 at King George VI and Staines reservoirs on the 11th. From May to July the only records were of two pairs in June at the same group of reservoirs, a pair at Perry Oaks S.F. in late May and June (probably one of the same two) and two pairs at Sevenoaks G.P. on June 29th and three birds on July 26th. Records increased in August as usual and by the 31st there were 35 at Queen Mary Res. The maxima at the end of the year were 60 at Queen Elizabeth II Res. on Nov. 15th and 46 at King George VI and Staines reservoirs on Dec. 4th.

54 Red-crested Pochard

The presence of up to 30 full-winged birds in St. James's Park makes all records of this species suspect and probably results in some

observers no longer recording it. The only records received for outside Central London are of a drake in eclipse at Nazeing Meads G.P. on Aug. 16th (PV), a pair at Walthamstow Res. on June 6th (JF), a drake "quite tame" on the R. Wey at Brooklands on Jan. 22nd (CO), a drake at Gatton Park on Nov. 15th and Dec. 13th (AME, FFBM), at Holmethorpe on Dec. 28th and 29th (RF, AJH, DS) and at Barn Elms Res. on the 30th (JE). The records for the last three localities could well refer to the same bird.

55 Scaup

- M Queen Mary Res., two on Feb. 2nd (JBC), a drake on Feb. 15th (JHB, JGC, AME) and 16th (JBC), Mar. 10th (BEC) and Dec. 19th (JBC). Staines Res., from one to three from Jan 4th (JBC, PAD) to 11th and a drake on the 13th (JBC) and Feb. 1st (IRB, RWG). An immature drake on Nov. 22nd (DGH) and 29th (JBC).
- K Brasted, a duck on Aug. 11th (FJH).
- S Barn Elms Res., a drake on Jan. 5th (JMS), 11th (SG) and 25th (FCR), a duck on Feb. 15th (RWG), a drake from Dec. 13th to 26th (RWA), two drakes on 27th (CRAC) and two ducks on the 30th (JG).

56 Tufted Duck

The winter of 1963-64 had been distinguished by high numbers of Tufted Duck as early as the mid-December count when there were 4,466, increasing to 5,517 (including an interpolation of 8%) by mid-January, of which about 2,700 were at Barn Elms and about 700 at Staines. By mid-February there were only 160+ at Staines but no count was made at Barn Elms, so no total figure can be given. The average for the November-January counts in that winter was 4,023, the second highest average of the series and ranking after 4,399 in 1962-63 when the average covered the November-February counts. In 1964-65 the gaps in the counts came to over 10% beyond which figure interpolation is considered unreliable. The October count of 1,034, which was complete, was very low for recent years, and while the ensuing discussion includes an element of guesswork it is fairly clear that on the November date the numbers were lower than at any time at this season for the last twelve years. The middle of December is a time when there can be wide variations from one year to another, and an estimated 2,500 is at about the level of the three lowest years of the last ten, whereas on four occasions the total in December has been over 4,000. With the weather milder than usual the flocks dispersed early.

Breeding records or those strongly suggestive of breeding include:—

- E One pair at Fishers Green G.P., six at Nazeing and three at Walthamstow Res., which is less than usual.
- H At least five pairs at Maple Cross G.P. and 22 at Rye Meads, where there were this number of broods totalling 110 young in August.

- M Two-three pairs at Hurlingham Club, one at Highgate Ponds, two in Hyde Park and Kensington Gardens.
- K 20 pairs at the Darenth and Sutton-at-Hone gravel pits on Apr. 30th and six broods seen there on July 10th. One pair at Ruxley.
- S At least five pairs at Barn Elms; one at Black Pond, Esher; one on Clapham Common (for second successive year); three in Gatton Park, one in Richmond Park, one at Molesey Res.
- April records with no further evidence have been excluded. In the autumn the peak of the usual build-up at Walton Res. was on Sept. 5th when there were 544. In between counts in the winter of 1964-65 there were fairly large numbers at the end of December, for example 900 plus at Staines on the 20th, about 925 at Barn Elms on the 27th and 457 in Hyde Park and Kensington Gardens on the 28th.

57 Pochard

The last *London Bird Report* referred to an influx in the latter half of December, 1963. This was reflected on Jan. 12th, 1964, by a total of 2,318 (interpolation $6\frac{1}{2}\%$), of which about 400 were at Staines and 1,500 at Barn Elms. Not included in these figures was a flock of about 500 diving ducks at Swanscombe on the 11th, mostly of this species. Three days later there were 12 on the Thames off Millbank in snow. It may or may not be relevant to the Barn Elms flock that there had been 1,150 at Staines on Jan. 5th. There were still 1,500 at Barn Elms on the 26th.

Failure of one or more of the regular counts in the winter of 1964-65 on waters where an appreciable proportion of the total numbers are often to be found prevents the compilation of total figures for that winter. On the January, 1965, count, however, there were only 961 and localities not counted were unlikely to add more than a hundred. It seems probable that the counts in other months would have been smaller. This compares with over 2,000 at the peak periods in both the two previous winters.

There are no breeding records, but it is of interest that 42 Pochard flew off high to the north-east from Painshill Park on Apr. 5th. Five drakes at Maple Cross G.P. on June 28th suggest a pre-moulting assembly. At the end of the year very few had come in by the middle of December, but about a week later there were 300+ at Staines, 350 at Queen Mary Res. and 300 at Barn Elms, where they had increased to about 600 by the 30th.

58 Ferruginous Duck

- M King George VI Res., a drake on Dec. 19th (JBC, SG) was still there on the 31st. Record accepted by the *B.B.* Rarities Committee.

60 Goldeneye

The peaks in the duck counts of 1961-62, 1962-63 and 1963-64 were 70, 106 and 81 respectively. This level, which is higher than in the years preceding, was maintained in 1964-65 when the peak was 93. In the early months of 1964 the largest numbers at any one group of reservoirs were 51 at the Staines group on Mar. 5th (JBC), a time when numbers may be inflated by spring passage. The last seen in spring were a drake and a duck at Barn Elms on May 4th (LRs, WR). In the closing months they were unusually numerous at Staines culminating in a gathering of 75 on Dec. 24th (JBC), at a time when there had been a sudden influx both of surface-feeding and diving ducks.

61 Long-tailed Duck

M Queen Mary Res., one which was probably an immature duck was present from the beginning of the year until Mar. 21st (FJL) and was seen by many observers.

62 Velvet Scoter

E King George V Res., a duck on Apr. 17th-18th (JCE).
 M Queen Mary Res., six from Oct. 29th (BEC) to Nov. 4th, two-three until the 28th and then one until the end of the year (JBC *et al.*).
 Staines Res., one on Dec. 20th (PJO).

64 Common Scoter

E Girling Res., a drake on Mar. 27th and Oct. 31st (JF). King George V Res., a drake on Mar. 3rd, and a duck on Oct. 11th and Nov. 15th (JCE, JF, BSMs).
 H Rye Meads, a pair on Apr. 12th (LL-E).
 M Staines Res., a duck on Feb. 1st (AJC); 27 flew in from the east at 10.25 hours on July 27th and left to the west at 21.20 hours. They associated with six Garganey (JBC). Twenty of this party were also seen by MC. A drake from Aug. 5th (RWG) to 7th and a duck from 17th (JBC) to 22nd (LAB).
 K Lullingstone, a duck on Nov. 29th (PB).

69 Red-breasted Merganser

E Walthamstow Res., a duck on Feb. 1st and 4th (JF, RFS) and two ducks on Apr. 18th (JF).
 M Queen Mary Res., a duck on Feb. 9th (JBC). Staines Res., up to three ducks from Nov. 7th to Dec. 31st (JBC), two of them being also seen by SG on Nov. 15th.
 K Sevenoaks G.P., a drake on Jan. 16th (JGH, JMH).

70 Goosander

After the unprecedented numbers in the winter of 1962-63 (winter average 488 and peak 888) the following winter was an anti-climax with the figures respectively about 60 and 140.

In 1964-65 there were 75 and 107, the lowest since the monthly wildfowl counts started.

To revert to 1963-64 the winter build-up at Staines had started in the last few days of 1963 (*L.B.R.* 28: 24) and the maximum of 128 was on Jan. 5th. After this numbers fluctuated violently with 90-100 on Feb. 9th but counts as low as 20 in between. It is almost certain that there was some interchange between Staines and Walton reservoirs as the size of the flock there also varied greatly, with a maximum of *c.* 130 on Jan. 29th. Counts on the same dates though not necessarily at the same time were:—

	January			February		
	5th	11th	1st	9th	16th	29th
Staines Res	128	91	22	90-100	15+	16
Walton Res.	5	2	95	30	57	25+
Queen Mary Res.	?	11	?	12	25	?

It is worth remembering that Goosanders from other waters have traditionally tended to gather at Walton Res. in the evening for roosting. With these figures in mind it is probable that the highest total of 140 on the monthly counts was not in fact far out, as very few Goosanders were seen elsewhere in the Area that winter. The previous winter, in contrast, there had probably been 1,000 in between the monthly counts, on which the peak was 888 as already mentioned. At Walthamstow Res. the injured duck which was first seen in February, 1961, was present throughout the year. At the end of 1964 the only large gathering was of 75 at the Staines group on Dec. 26th, following a general influx of waterfowl.

71 Smew

In the winter of 1963-64 the highest monthly count was 60 on Feb. 16th, 1964, and in 1964-65 the peak on these counts was 81 on Jan. 17th, 1965. These figures are very similar to the average maximum during the preceding five winters, but as has been said often Smew probably move about more than any of the other ducks and undoubtedly the counts tend to underestimate the actual numbers.

The following notes give details of the largest gatherings at the main localities and of records in Inner London, the only other records referring to not more than four birds at a time at other reservoirs:—

- M Brent Res., 44 on Feb. 19th, one pair last seen Apr. 5th, and 14 on Dec. 31st (*LAB*). Kempton Res., 18 on Jan 11th (*GCG*). Staines Res., 62 on Feb. 1st (*IRB*) and 32 on Dec. 26th (*JBC*). Stoke Newington Res., 22 on Feb. 4th (*JF*). Inner London: Regent's Park, a drake from Jan. 25th to Feb. 1st, another from Feb. 20th-21st, a duck on the 22nd and two on the 23rd (*DIMW*).
- S Barn Elms Res., 11 on Jan. 25th (*GCG*) and four at the end of Dec. Molesey Res., nine on Feb. 9th (*GCG*).

73 Shelduck

Inland, single Shelduck were seen in January at King George V Res., and Sevenoaks and Sundridge G.P.s, and some of a party of seven at Staines on the 3rd stayed until the 12th. There were records at six localities in February, excluding a "resident" which frequented the Thames in the Hammersmith area for the rest of the year. The largest party was one of five on the 24th at Staines again. After one record of two on Mar. 1st, the only spring reports were of three birds in April, 14 flying N.W. at Staines on May 14th and a party of five at King George V Res. on the 20th.

In autumn, a single bird stayed at Girling Res. from Aug. 29th to Oct. 18th, and a juvenile at Brent Res. from Aug. 30th to Sept. 26th, a second being seen on Sept. 8th-9th. On the 12th there were seven juveniles at Queen Mary Res. and one juvenile at Barn Elms. No more were seen until the end of December, when a few appeared during the general influx of ducks in the last ten days, probably involving three birds of this species.

Between the centre of London and the estuary two were seen on Beckton Level on Mar. 17th and Apr. 29th. At Rainham up to six were often present but there were 13 on Apr. 3rd, 18 on Aug. 14th and then varying numbers up to 43 on Sept. 21st. Further down river at Swanscombe the peaks were 96 on Jan. 5th, 226 on Feb. 23rd and 123 on Mar. 14th. In spring and summer two or three were often seen, and there were six juveniles at Littlebrook on July 22nd.

74 Ruddy Shelduck

M Staines Res., a duck or immature on Oct. 10th (JBC) may obviously have been an escape.

Grey Geese *sp.*

S Weybridge, *c.* 45 flew over west at 08.32 hours on Nov. 29th (GHG).

75 Grey Lag-Goose

H Hilfield Park Res., three on Dec. 18th appeared very wild (ASK).

76 White-fronted Goose

M Queen Mary Res., two adults flew over on Dec. 28th (MDK). Inner London: Regent's Park, 18 flew east over the lake on Mar. 1st (RGG, DIMW).

K Chipstead, two grazing on Jan. 8th (RWC). Sevenoaks, pair on Jan. 15th and one from Jan. 31st to Mar. 21st (JGH, JMH).

79 Lesser Snow Goose

K Sevenoaks, the one which arrived in Dec. 1963 was still there at the end of 1964 (JGH, JMH). Obviously the origin of this bird must be doubtful in view of the number kept in captivity.

80 Brent Goose

M Brent Res., two on Jan. 10th (PEF).

- K Swanscombe, six flew E. on Mar. 14th (CHD, AW).
 S Walton Res., five flew in from S. and left N.W. on Jan. 11th (AJC).

82 Canada Goose

- B Sunnymeads G.P., four pairs bred. 32 on July 16th (DGH).
 E Walthamstow Res., one from Sept. 12th to 27th when it was shot (JF). Wanstead Flats, one on Mar. 28th (JAS).
 H Hamper Mill, three on Apr. 7th and two on 14th (RC). Pynesfield G.P., four on Sept. 6th (IGJ). Nr. Rickmansworth, two on May 1st, Troy Mill, two on May 1st (MC).
 M Harefield Moor G.P., four on May 10th (IGJ). Highgate Ponds, two on Mar. 26th (MT). Mill Hill, one flying north on Nov. 13th (EHW). Southgate, two on Feb. 5th (RFS). Waterlow Park, two flying over on Oct. 7th (RCB). In Inner London two pairs bred in Battersea Park, two in Hyde Park and Kensington Gardens and four in St. James's Park, where the autumn flock reached 49. The highest number in Hyde Park was 56 on Dec. 15th.
 K Darenth and Sutton-at-Hone G.Ps. three pairs on Apr. 15th and two nests (RVW). Sevenoaks, four pair with broods in May (JGH, JMH).
 S Selected records only. Barn Elms Res., breeding attempted unsuccessfully (LRs, WR). Painshill Lake, one pair bred successfully (DP). The largest flock was one of 23 at Weybridge on Oct. 11th (GHG).

84 Mute Swan

The numbers on the monthly wildfowl counts continue to decline. Although the only locality included where swans are at all numerous is the Thames between Putney and Barnes, numbers there have dropped tremendously in the last few years.

	Oct. 15	Nov. 15	Dec. 13	Jan. 17	Feb. 14	Mar. 14
1964-65	183	146	133	150	112	175

Apart from localities included in the above summary, the largest flock recorded was one of 44 at Stockers Lake on Oct. 11th.

85/86 Swan *sp.*

- M Ruislip Res., six wild swans flew over on Dec. 28th and were thought to be Bewick's (BPP).

85 Whooper Swan

- E Hornchurch Chase, two on Nov. 29th (DGHn, JW).

86 Bewick's Swan

- H Hilfield Park Res., one immature bird from Nov. 1st to 7th (EHW). Stockers Lake, 15 on Dec. 31st (JRB, JDM, MNR).

91 Buzzard

- S Morden Hall Park, one soaring over the park before flying off S.E. on Aug. 27th (MJcd).

Buzzard *sp.*

- K North Cray, one drifting slowly S.E. on Oct. 1st (CHD).

93 Sparrow Hawk

The decline of this species continues; sightings for the current year amounted to about half the 1963 total. No breeding was noted anywhere and only on one occasion was a pair seen. All records are given.

- H Mimmshall Wood, one on Jan. 12th (MPI). Northaw, one on July 12th (TJ, JL).
- M Osterley, one on Apr. 12th (PMS). Inner London: Regent's Park, one flew N.W. on Apr. 6th (RCG) and a pair were watched circling the Baptist College site for several minutes before flying N.E. on May 17th (RCG, DIMW).
- S Inner London: Lambeth, one flew high N.W. on Nov. 20th (GHG). Weybridge area, one on Mar. 27th, Sept. 6th and Dec. 6th (GHG). Walton Heath, one on Feb. 22nd (AJH). Beddington S.F., one on Mar. 22nd (MSA). Kenley, one flying east on Apr. 8th (KHH). Nork Way, Banstead, one on Apr. 6th and 11th and Dec. 29th and 30th (EMF). Addington, one flew S.W. on Apr. 16th (DS). Ashurst Rough, one on May 12th (GMC). Reigate, one on June 6th (RHBF).

103 Osprey

- H Rye Meads, one flew S.E. at 11.00 hrs on May 24th (LL-E).

104 Hobby

- M Brent Res., one on Apr. 24th (LAB). Mill Hill, one on May 16th (EHW). Staines and adjacent areas, seen on a number of occasions from May 22nd to Sept. 9th (mo).
- K North Cray, a male on June 11th (CHD). Brasted Station, one on June 14th (RVW). Sevenoaks, one on Aug. 10th (JGH, JMH).
- S Esher Common, a female on Apr. 25th and June 28th (SG, DP). Bookham Common, a pair on May 18th (TLB, MLC). Weybridge, a male on Sept. 2nd (GHG).

105 Peregrine

- S Inner London: Lambeth, one flew N.W. on Nov. 13th (GHG).

110 Kestrel

It is encouraging that no further decrease was reported, and the good response to the 1963 appeal for records continues. Future breeding records and reports of family parties or resident pairs will still be welcomed by the recorders. Unless otherwise stated, the mention of a locality below indicates that a pair was present in the breeding season.

- E The position was summarized by BSMs as follows: there were definite breeding records from Walthamstow, two pairs, Brentwood, Rainham, Grays-Thurrock, Sewardstone and Wanstead Park, and birds were reported in the breeding season at King George V Res., Stratford, Bow and Barking.
- H Only one definite breeding record, at Cheshunt Common (JAH), but

pairs were reported at Aldenham, Shenley, and Ponsbourne Park (ASK, JAH).

- M Definite breeding records from Ealing (four pairs), and Southall (PMS), Staines Moor (DGH), Poyle G.P. (MC), and pairs may have bred at Strawberry Hill (LB), Potters Bar (two pairs) (RFS), Stanwell (PAD), Holloway and Highgate (RCB), and Hampstead Heath (MT).
- M/S Inner London: Bloomsbury, a pair bred near the Senate House (EHW). A pair were considered to be breeding near Regent's Park (DIMW). At Langham Place on May 22nd a male was taking food into a ventilator (sc), and at Cripplegate a bird was seen to enter the church tower of St. Giles's on May 30th and June 7th. Pairs were also seen over Victoria Station on May 4th, Cavendish Square on May 7th and at New Fetter Lane in April.
- K Two adults and three juveniles were seen at Petts Wood on July 24th (KHP). Sevenoaks, Sidcup Golf Course, and Hogtrough Hill Quarry were the only other places where more than one bird was seen.
- S Richmond Park, five pairs bred (CES). Beddington S.F. and Mitcham Common, three pairs bred, two successfully (ADP). One pair bred at Epsom Common, East Molesey, Dulwich Common and Riddlesdown, and pairs were strongly suspected of breeding at Morden Park, Worcester Park, Ashted Forest, Bookham Common, Banstead Downs, Headley Heath, Sanderstead and Farthing Downs. Two observers, HEP (North Downs) and PAD (Carshalton-Mitcham) consider the species to be holding its own in their areas. JdERK saw three times as many birds in the Molesey district in the July to December period as he did in 1963.

115 Red-legged Partridge

Breeding season distribution is given.

- E Romford S.F., one to four from April to the end of the year (RRS). Ockenden, one pair (MJA). Hainault and Barkingside, three pairs bred (ACP). Sewardstone, two on May 10th and 11th (PFB). Nazeing G.P., two on May 24th (BSMs).
- H Shenley, three pairs (ASK). Cuffley and Northaw, eight pairs; at Northaw it outnumbers the Common Partridge (TJ, JAH, JL). Rye Meads, eight birds on Apr. 13th (RMRG).
- M Trent Park, one on May 31st and July 12th (CB).
- K South Darenth G.P., two on Apr. 8th (RVW). Swanscombe, one pair bred (FJH). Near Farningham Wood, one pair on Apr. 29th; Horton Kirby, one pair on May 21st (RVW).
- S Walton-on-Thames, one pair on Apr. 30th (WRI). Near Woldingham, two on May 9th (AJH). Wey Manor Farm and Sandown Park Race Course, up to eleven between September and December suggests that breeding may take place unnoticed (GHG).

117 Quail

A 'Quail year' but only widespread in any numbers in a small area of Kent. All records are given.

- E King George V Res., one on Sept. 10th (JCE).
 H Chorleywood, one calling on the evening of May 26th (PT).
 M Perry Oaks S.F., one on May 21st (EP-J); at least three on Aug. 2nd (JMS).
 K With the exception of Keston, the following localities are in the valley of the River Darent. None was seen and all the records refer to birds heard calling, mostly from fields of barley. Clement Street, two in separate fields from May 27th to July 18th (KHP, RVW). South Darenth, two on July 3rd (WIB). Bean, one on July 9th (WIB). Eynsford, one half a mile east on July 17th, and one or two a mile west on July 20th; Dean Bottom, one on July 18th (RVW). Horton Kirby, one or two from July 19th to Aug. 12th (mo). Lullingstone, one on July 29th (RVW). Keston, one on May 30th (EWR).

120 Water Rail

- H Five records of single birds at Old Parkbury, Cassiobury Park, Rickmansworth and Nyn Park during the months of January, November and December (JRB, JWD, TJ, JL, EHW).
 M Ruislip and Highgate Ponds, one or two birds present at both ends of the year (BPP, MT). Brent Res., one on Mar. 15th (LAB). Perry Oaks S.F., one on Nov. 14th and 15th (JBC).
 K Up to three birds reported in the winter months at Elmers End S.F., North Cray, Ruxley, Sevenoaks and Northfleet, but only at Ruxley at both ends of the year (mo).
 S Beddington S.F., one to three at both ends of the year (mo). Hersham S.F., one on Jan. 12th and 18th (DP). Barn Elms Res., one on Apr. 6th (DGG, PEN, PJSn). Wandsworth Common, one on Apr. 22nd (JG). Ham Moor G.P., one on Sept. 6th; Silvermere, two on Sept. 21st (GHG). Bookham Common, one on Nov. 8th (CPC,LM).

125 Corncrake

- E Walthamstow, one ringed and photographed on Sept. 22nd (KEH, FJS, BU).
 S Beddington S.F., one calling from July 16th to the end of the month (AMH, RFP, RCR).

126 Moorhen

In late December at Waltham Abbey, BSMS saw several birds feeding on dying fish, mostly Barbel and Bream, which were eaten alive. On Dec. 1st in Bloomsbury, HW found one on a dry building site; it flew off when mobbed by starlings. In Surrey, DP noted an increase from *c.* 6 on Sept. 19th to *c.* 50 on Sept. 26th at Hersham S.F.

131 Oystercatcher

- E Walthamstow Res., two on Jan. 23rd, one on Mar. 17th (RFS). Girling Res., one on May 9th (JF). Rainham Marsh, two on Aug. 11th (RT); eight on Sept. 2nd (PW).

- M Queen Mary Res., one on Mar. 28th and Oct. 25th (PAD, MC).
 Staines Res., one on May 10th and Sept. 17th (BEC, CMV). Dukes
 Meadows, Chiswick, one on Aug. 1st (RHK). Mill Hill, one flew over
 on Nov. 29th (EHW). King George VI Res., one on May 10th (JBC).
- K Littlebrook, six on Aug. 15th (KN). Sevenoaks, one on Aug. 11th and
 one during November (JGH, JMH).
- S Barn Elms Res., one on Aug. 16th (MDK). Walton Res., two on
 Mar. 2nd (WRI).

133 Lapwing

On Jan. 13th, after snow, parties totalling some 550 flew between S.E. and S.W. over areas as far apart as Lambeth, Dollis Hill and Sevenoaks. A small return movement northwards was noted over Ruxley and Hersham on Jan. 25th and 26th. Beddington S.F. had a flock of *c.* 750 on Jan. 30th.

Compared with 1963, spring movements were practically non-existent and were only reported from three localities on Mar. 10th and 21st.

The post breeding westerly movements began as usual during the early part of June and continued till the middle of August in some places. Observations were widespread but numbers were small and only at Rye Meads and Brent Res. were flocks of over 100 recorded, on June 27th and Aug. 15th respectively.

A hard weather movement was a feature of the end of the year. Isolated movements S.W. were noted in three places on Dec. 4th, 6th and 10th, but the main push southwards came conveniently for observers on Christmas Day and the following three days. Records for Christmas Eve and Dec. 29th are completely absent, suggesting the movement was confined to four days. Christmas Day observers noted *c.* 750 heading south over four localities and about half this number on Boxing Day. The movement reached a peak on Dec. 27th when birds were seen at fourteen localities. The largest counts were 278 flying S.W. at Danson Park, 200 S.W. in three hours at Staines, 357 S.W. in two and a quarter hours at Hayes, and 46 flocks of varying size totalling 1,688 between 12.45 and 15.25 hrs. at Worcester Park. Comments from observers such as "all day", "all the morning" and "continuous" give some idea of the scale of the movement. On Dec. 28th, a total of 1,600 were moving over only two places in Kent, and at Beddington S.F. *c.* 1,000 were present.

134 Ringed Plover

A pair nested at Swanscombe, Kent, but the eggs were deserted (DJM), and a pair remained throughout the breeding season at Rainham, Essex, but no nest or young were found (DB, JHB, KN, RT).

The largest number reported was 225 at Rainham Marsh on Aug. 14th during the autumn passage. Inland the largest party was *c.* 30 at

Perry Oaks S.F., on June 4th at the end of the spring passage.
Frequent at the Thames marshes in the winter months, but the only inland record was one at Queen Elizabeth II Res. on Dec. 4th (WRI).

135 Little Ringed Plover

Of a possible 23 pairs at 17 localities in the breeding season, 20 pairs bred or attempted to do so.

- E Six pairs at four sites but only five young reached the flying stage (PFB, JC, JF, BSMs).
- H Five pairs at three sites with no record of any flying young (RMRG, BSMs, JJW).
- M Six pairs at four sites; four pairs bred and at least six young flew (BEC, MJcd, BSMs, DGH).
- B One at a suitable locality on May 16th.
- K Three pairs bred at two sites; at least two young reared; one pair lost a clutch of eggs to a grass snake (mo).
- S Three pairs at three sites, but breeding success not known (AME, RF, GHG, DW).

139 Grey Plover

- E Rainham Marsh, two on Mar. 28th and one Apr. 5th (AFH).
- M King George VI Res., one on Jan. 11th (JBC), and one on Oct. 25th (PJH). Staines Res., one on Aug. 14th (JBC).

140 Golden Plover

All records are given.

- E Rainham Marsh, six on Dec. 17th (KN).
- H Shenleybury, 226 on Feb. 23rd; Shenley Hill and Rabley Park, 25 during December (ASK).
- M Staines Moor, 27 on Feb. 9th (WRI). Perry Oaks S.F., one on Feb. 11th (AJC). London Airport, 34 on Apr. 15th (BEC); 120 on Nov. 1st (JBC). Hampstead Heath, one on Apr. 19th (MT). Mill Hill, several flying north on Apr. 27th (EHW). Dollis Hill, two flying north on Aug. 15th (ES).
- K Elmers End S.F., three on Jan. 19th; one Sept. 3rd to 10th (TK). Dartford Creek, two on Mar. 14th (CHD). Otford, one on Apr. 22nd; Sevenoaks, one found dead on Mar. 12th, one on Sept. 30th and Dec. 2nd (JGH, JMH). Danson Park, eight flying W.N.W. on Dec 27th (RVW).
- S Beddington S.F., six on Mar. 7th (DJH); ten on Mar. 10th (BRS). Barn Elms Res., four on Mar. 21st (LRS, WR). Hersham S.F., two on Mar. 24th (DP). Worcester Park S.F., 64 flying S.E. with Lapwings between 12.50 and 13.05 hrs on Dec. 27th (MJcd).

143 Turnstone

- E Girling Res., one on Apr. 26th (JCE); three on May 25th (JF); one on July 26th (JCE). Rainham Marsh, seven on Aug. 14th and one on Aug. 18th (KB, KN). Romford S.F., one from Aug. 23rd to 28th (RRS).

- M Staines Res., one Apr. 27th, three May 13th, one July 24th and 31st, two on Aug. 8th, and one on Aug. 18th and 19th (JBC, GCG). Queen Mary Res., two on Aug. 15th; Perry Oaks S.F., one on May 10th, three on May 13th and 14th (BEC, DGH, JBC).
- K Sevenoaks, one on July 26th (JGH, JMH). Swanscombe, two on Aug. 14th (FJH).
- S Beddington S.F., three on Aug. 12th (MSA).

145 Snipe

Pairs were present at two localities in the breeding season, and one pair definitely bred.

Only maximum winter numbers are given below.

- H Rye Meads, 100 on Apr. 6th (RMRG).
- M Perry Oaks S.F., 150-200 maximum (PAD).
- K Elmers End S.F., 150 in January, 200 in late December (TK).
- S Beddington S.F., between 200 and 1,000 January to March; 700 in December.

147 Jack Snipe

- E Recorded only from Romford S.F., up to six from Oct. 31st to the end of the year (RRS).
- H One or two present at Cuffley S.F., Northaw, Rye Meads and Maple Cross from January to April and from October to December (mo).
- M Staines Moor, up to five in January and February (PAD). Brent Res., Edmonton and Perry Oaks S.F.s, singles on six winter and spring dates.
- K Recorded at Swanscombe, Ruxley, Littlebrook, Elmers End S.F., Norwood S.F., and Sevenoaks, the largest numbers being *c.* 20 at Swanscombe at the beginning of the year (TK), and 12 at Norwood S.F. on Nov. 22nd (JGCD, MAH).
- S Hershaw S.F., up to four at both ends of the year (DP). Beddington S.F., ten to twenty during January to March and up to seven in November (BRS). Worcester Park S.F., six on Dec. 20th and 27th (MJCD). Holmethorpe G.P., eight on Mar. 30th, and up to two there and at Godstone and Richmond on several winter dates.

148 Woodcock

Breeding season records are given.

- E Thorndon Park, one roding on June 16th and 26th (MSF, ETL, TJL).
- H Northaw Great Wood, one roding on Apr. 11th and one on five dates in June, July and August (MBC, TG, GTH, BLS). Mimms Wood, one on Apr. 17th and two on May 15th (MPI). Broxbourne Woods, at least four pairs on May 27th, and three roding on July 2nd (PEF, RFS, EHW). Bayford, one on June 17th (EHW).
- M Highgate Woods, one on May 2nd (MT).
- S Bookham Common, one roding on May 5th and July 3rd; three nestlings found during May (GB, GHG, EHH, PJO). Princes Coverts, one roding on June 20th (KDGM). Esher Common, one roding from mid-June to early July (MC, PJO). St. George's Hill, a juvenile on

July 14th (DAB). Limpsfield Chart, one roding on May 8th (AJH).
Juniper Top, one on May 28th (GMC).

150 Curlew

Recorded in ones and twos in every month except June. Larger numbers in July and August, including 30 flying south at Blackfen, Kent, on Aug. 7th and 15 at Rainham, Essex, on Aug. 21st. Two Inner London records: single birds in Regent's Park on July 16th and Oct. 3rd (RCG).

151 Whimbrel

- E Walthamstow Res., one on Apr. 30th (RFS). Girling Res., one on Aug. 2nd (JF).
- M Perry Oaks S.F., three on Apr. 26th (BEC). Stanwell Moor G.P., two on May 11th (DGH). Canonbury, nine on Aug. 2nd (RN). Queen Mary Res., at least six on Aug. 23rd (BEC). Staines Res., 14 on July 28th (JBC) and three on Aug. 29th (GHG). King George VI Res., one on Sept. 18th (JBC).
- K Sevenoaks, one on Apr. 25th (JGH, JMH). Badgers Mount, 13 flying south on July 25th (PCB). Chislehurst, many calls heard from a flock flying over at 18.35 hrs. on Aug. 26th (KHP).
- S Beddington S.F., one on Apr. 19th (PAD, DJH). East Molesey, one on May 1st and Aug. 9th (PJO). Chessington, birds heard calling over observers house shortly after midnight on May 6th (DP). Ewell, one flying north, calling, at 22.00 hrs on May 11th (IRB). Addington, one flying over on Aug. 6th (DS).

154 Black-tailed Godwit

- M Perry Oaks S.F., one on May 10th (BEC). Staines Res., one on Aug. 18th (MC).

155 Bar-tailed Godwit

- H Rye Meads, two on Sept. 12th (LL-E).
- M Staines Res., one on Aug. 23rd (PJSn).

156 Green Sandpiper

Recorded in every month of the year with the peak of the autumn passage in August, but the largest number at any locality was only 10 at Rainham, Essex, on Aug. 16th. Winter records of one or two from Maple Cross, Old Parkbury, Littlebrook, Stone, Sevenoaks, Island Barn Res., and Beddington S.F.

157 Wood Sandpiper

All records are given, the species being particularly scarce south of the Thames. There was only one spring record.

- E Singles at Nazeing G.P., Romford S.F., and Girling Res. in mid-July and the second half of August (JCE, BSMs, RRS), and at Rainham Marsh, one or two between July 10th and Aug. 18th (JHB, KB).

- H Rye Meads, one on June 9th and 11th (RMRG). The seven autumn reports spanned eleven weeks: Rye Meads, one on July 26th and Sept. 6th (RMRG); Cuffley, one on Aug. 29th and Sept. 12th (TJ); Broxbourne G.P., one on Aug. 20th (PRJA); Hilfield Park Res., one on Aug. 30th and Aldenham Res., one on Oct. 10th (ASK).
- M Ruislip Res., one on Aug. 1st (BPP). Brent Res., one on Sept. 3rd and 30th (EHW).
- K Swanscombe, one on Aug. 19th and 20th (RVW).
- S Barn Elms Res., one from Aug. 14th to 19th (MDK, BAM, FCR, JMS, PJSn).

159 Common Sandpiper

Isolated birds were reported during January from Troy Mill, Denham, Elmers End S.F., and Beddington S.F. As none were noted in February, the appearance of single birds at Hilfield Park Res., and Beddington S.F. on Mar. 1st and 2nd respectively may have been an early start to the spring migration. The main spring movement was from Apr. 5th to May 25th with never more than six at any one locality. Two birds at Sevenoaks on June 29th heralded the start of the return migration which lasted until Oct. 3rd when a single was present at Old Parkbury. Peak numbers of 40 at Rainham, 30 at Girling Res. and Swanscombe occurred between July 19th and 27th, whilst a second peak was noticeable around the middle of August, but smaller numbers were involved. No breeding was reported and the only Inner London record was of three flying south off Millbank on Sept. 1st (GHG).

161 Redshank

Breeding season records, which are given below, and reports of birds at 14 localities in winter were fewer than last year. The largest numbers again came from the Thames marshes with a maximum winter flock of 150 at Long Reach on Jan. 11th (CHD).

- E Rainham and Aveley Marshes, eight pairs; Beckton Level, up to three, but breeding not proved (JHB). Waltham Abbey, one pair bred successfully (BSMs).
- H Rye Meads, ten on May 20th and 16 on June 6th (RMRG). West Hyde G.P. one on June 20th (BPP).
- M Staines Moor, two pairs bred, one successfully (DGH). Stanwell Moor G.P., one pair bred (JBC).
- K Swanscombe, two on June 13th (REFP).
- S Beddington S.F., three pairs holding territories, but breeding not proved (MSA, ADP, RFP).

162 Spotted Redshank

- E Rainham Marsh, two on Aug. 10th, four on Aug. 11th and one on Aug. 21st (DB, KN, RT).
- H Maple Cross S.F. and G.P., one or two on seven dates between Aug. 10th and 23rd (MC, HCD, IGJ, BPP).

- M Brent Res., one from Aug. 7th to 21st (mo). Perry Oaks S.F., one on Aug. 15th (IRB). Staines Res., two on Aug. 19th (BEC). Ashford G.P., one on Sept. 2nd (BEC).
- K Swanscombe, one from Aug. 11th to 13th (RVW), and one on Sept. 6th (KHP).
- S Barn Elms Res., one very tame bird on Aug. 16th (FCR, KDM, JMS, PJSn).

165 Greenshank

With only two in spring and fewer noted in autumn than usual, this species was much scarcer than in recent years. All records are given.

- E Rainham Marsh, one on July 16th and 24th (JHB). Girling Res., present on several dates during August with a maximum of six on the 15th (DV).
- H Rye Meads, one on Apr. 26th; up to six between July 26th and Aug. 23rd (RMRG). Troy Mill, four on Aug. 3rd (BPP). Maple Cross S.F., two on Aug. 12th (MC). Hilfield Park Res., one on Aug. 28th (ASK).
- M Brent Res., up to five from Aug. 8th to 19th and one on Sept. 20th (LAB). Staines Res., one on Aug. 17th and 23rd (BEC, DIMW), two on Sept. 25th and one on Oct. 3rd (HJF, ADP). King George VI Res., one on July 14th and 19th (JBC) and one on Aug. 22nd (LAB). Staines Moor, one on Sept. 17th (CMV). Queen Mary Res., one on Aug. 15th (JBC).
- K Swanscombe, one on July 29th and three on Aug. 15th (BEC, FJH). Elmers End S.F., one from Aug. 14th to 26th (TK). Darenth/Erith, two on Aug. 13th (AC). Sevenoaks, one on Aug. 19th (JMH, JGH). Downe, one flying south on Aug. 20th (RGB, AJW).
- S Ham Moor G.P., one Apr. 21st; four on Sept. 2nd and one Sept. 8th (GHG). Hershams S.F., one on Aug. 15th (DP). Barn Elms Res., one on July 26th and Aug. 19th (BAM, FCR). Holmethorpe G.P., one on Sept. 4th (JNR).

169 Knot

- E Romford S.F., one on Feb. 16th and 17th (RRS). Rainham Marsh, one on July 19th and three on Aug. 16th (RT).
- M Brent Res., two in flight on Jan. 15th (PEF). King George VI Res., c. 150 flew east on Nov. 28th (JBC, DNP).
- K Swanscombe, three on Jan. 19th (KHP).

170 Purple Sandpiper

- M Queen Mary Res., one on Nov. 4th (BEC).

171 Little Stint

- E Rainham Marsh, two on July 27th (JHB), up to six between Aug. 14th and 21st (mo). Romford S.F., one on Sept. 27th (RRS).
- H Rye Meads, one on Aug. 30th and 31st (RMRG). Maple Cross G.P., two on Sept. 5th, 6th and 8th (HCD, IGJ).
- M Perry Oaks S.F., one on May 19th and 20th (JBC, PAD); up to three

from Sept. 20th to 28th (mo) and one on Oct. 11th (JMS). Staines Res., one on July 28th (JBC).

K Swanscombe, one on Jan. 5th and 19th (WIB, KHP), two on Feb. 9th (DIMW), one on Mar. 27th (CEW), one on Apr. 7th and 12th (RVW, KHP); one from Aug. 11th to 17th, three on Sept. 6th and one on Oct. 4th (FJH, DJM, KHP, RVW).

S Barn Elms Res., one on Oct. 11th (RWA, GCG, MDK, PJSr).

173 Temminck's Stint

M Perry Oaks S.F., one on May 13th, 16th and 17th, and two on May 25th and 26th (BEC, MC, DGH, CMV). Full details have been received.

176 Pectoral Sandpiper

M Perry Oaks S.F., one on July 19th (JBC, PAD). Harefield Moor, one on Dec. 29th was found dead on Jan. 2nd, 1965 (IGJ).

178 Dunlin

Recorded in every month of the year. Large numbers in winter at the Thames marshes including 1000+ at Swanscombe and 1,550 at Rainham on Jan. 12th. There were two records from sites not normally frequented by this species: one at the edge of Eagle Pond on Clapham Common on Jan. 16th and one at a small pond on Wimbledon Common on Oct. 31st (MB, LR, WR).

179 Curlew Sandpiper

H Hilfield Park Res., one on Aug. 30th (ASK).

181 Sanderling

E Girling Res., one on May 17th (JF). Rainham Marsh, one on July 27th and two on Aug. 12th (JHB, DB).

H Rye Meads, one from May 7th to 9th (RD, LL-E).

M King George VI Res., four on May 17th (JBC). Perry Oaks S.F., up to four between May 12th and 18th (mo). Queen Mary Res., two on May 13th (BEC). Staines Res., one on May 8th, two on May 13th, three on May 17th; one on July 27th and Aug. 18th (JBC).

S Barn Elms Res., one on Apr. 27th (DCG, RWA, PFN, PJSn); one on May 4th (LRs, WR).

184 Ruff

The winter flock in the Perry Oaks S.F. area showed a slight increase in numbers in the latter part of the year, with a maximum of 15 on Nov. 1st (CMV). Other winter localities included Hornchurch Chase, one on Nov. 29th (JW), Dartford Marshes, one on Dec. 28th (KHP), Elmers End S.F., eight on Dec. 28th (TK), Swanscombe, one on Dec. 29th (FJH) and Littlebrook, three on Jan. 11th and Feb. 8th (CHD).

Spring migrants were reported at six localities, with a maximum of 14

at Rye Meads on Apr. 26th. As usual the autumn passage spread from July to the end of October. Maxima during this period included 27 at Romford S.F., on Aug. 22nd, 22 at Rainham Marsh on Aug. 18th and 15 at Rye Meads on Aug. 13th.

187 Grey Phalarope

E Rainham Marsh, one on Aug. 18th (KB).

189 Stone Curlew

E Grange Hill, one seen and heard calling as it flew N. on Apr. 7th (KN).
M Inner London: Regent's Park, one on May 8th flying S. was the first recorded for Inner London (DIMW).

193 Arctic Skua

S Barn Elms Res., one flying W. on Sept. 9th (PJSn).

199 Lesser Black-backed Gull

As usual reported from various localities during the spring and autumn migrations. Details of flocks of 400 or more are given. The lack of winter records is probably due to the failure of observers to record them rather than an absence of birds.

S Hersham, 600 on Aug. 8th, 400 on Sept. 1st, 500 on Sept. 4th and 800 on Sept. 10th (GHG, DP). Raynes Park, 400 on Sept. 3rd (PJSn).

200 Herring Gull

This species appears to be neglected by observers. Relatively few records were received except for Inner London, where a pair bred for the second successive year in Regent's Park, rearing one young (RCG). In St. James's Park six adults were present in June and although courtship, coition and the building of a nest took place, no eggs or young were seen (GHG, ABMM).

201 Common Gull

One found dead at Queen Elizabeth II Res. on Feb. 20th had been ringed as a chick at Kapelludden, Oland, Sweden on June 27th, 1950 (WRI).

202 Glaucous Gull

M Charlton G.P., one on Feb. 29th (MC).

203 Iceland Gull

E Beckton Level, one on Mar. 17th and 18th (JHB).

207 Little Gull

E King George V Res., one immature on Oct. 3rd (JF).
M King George VI Res., two immatures on Aug. 22nd (LAB). Staines Res., two adults on Apr. 17th, one sub-adult on May 3rd and 6th; up to two adults and three immatures from Aug. 11th to 24th, up to four

immatures from Sept. 5th to 13th (mo). Queen Mary Res., one immature on Aug. 23rd (JBC).

S Walton Res., one immature on Aug. 22nd (co).

208 Black-headed Gull

The decline in recent years of the breeding colony at Perry Oaks S.F. continued and only two nests on May 16th and on July 5th were reported (JBC, BEC). At Maple Cross one bird was seen on a nest on June 14th but not subsequently (IGJ). No young were seen at either site.

One found dead by Metropolitan Water Board workman during December 1963 had been ringed as a chick at Hällarna, Bråviken (Ostergötland), Sweden on June 8th, 1963 and another found at Queen Elizabeth II Res. on Feb. 13th had been ringed as a chick at Sjöfax, Kemiö (Turku and Pori) Finland on June 12th, 1961 (WRI).

211 Kittiwake

M Staines Res., two adults on Mar. 22nd (JBC). King George VI Res., one immature from Aug. 15th to 23rd, one adult on Aug. 22nd (LAB, JBC).

K Otford, one found oiled and dead at the end of March (JMH, JGH).

S Walton Res., one found freshly dead on Feb. 28th (WRI).

Inner London, Lambeth, Archbishops Park, one immature flew S.W. at 0730 hrs. on Aug. 28th (GHG).

212 Black Tern

Records for this species are dealt with under County headings as numbers and dates varied so much. All records are given except for Middlesex which is slightly summarized.

E Girling Res., three on May 16th (JF). Fishers Green G.P. and Nazeing G.P., one and ten respectively on May 24th (BSMs, RSTJ). Rainham Marsh, two on July 24th, one on Aug. 14th and 18th (JHB, KB).

H Aldenham Res., one on Sept. 17th (ASK).

M Staines Res., 61 on Apr. 27th (JBC), up to nine from May 16th to 25th (DGH, PAD, CMV), varying numbers from Aug. 11th to Sept. 20th with a peak of 28 on Aug. 17th and Sept. 13th (JBC). Queen Mary Res., 15 arrived from N.W. departed S. on Sept. 13th, the same day as there were 30 at King George VI Res. (BEC, PAD). Brent Res., two on Aug. 14th (LAB).

K Elmers End S.F., one on May 24th (TK, PM).

S Barn Elms Res., one on Apr. 23rd, 27th and May 10th and five on Apr. 24th, one on Aug. 19th and two on the 20th (mo). Richmond Park, one on Sept. 2nd (CES).

213 White-Winged Black Tern

M Staines Res., one immature from Aug. 16th to 23rd (JBC, SG, DGH). King George VI Res., one on Sept. 13th (JBC, PAD, DJH). Full details of

these two birds have been received. Both records have been accepted by the *B.B.* Rarities Committee.

214 Whiskered Tern

M King George VI Res., one from June 22nd to 24th (JBC, DGH, DIMW, BEC). Accepted by the *B.B.* Rarities Committee.

217/218 Common/Arctic Tern

The spring passage, consisting mostly of small numbers, lasted from Apr. 17th to June 27th. A flock of 21 at Staines Res. on Apr. 19th was the largest noted. A little more widespread in the autumn migration which lasted from July 8th to Sept. 28th. Usually seen in flocks under ten but on Aug. 13th there were 21 at Hilfield Park Res. (BLS), 52 at Brent Res. (LAB), 14 at Barn Elms Res. (RWG) and 17 flew E. over Broomfield Park (FJC). On Aug. 22nd LR and WR saw a flock of 40-50 fly in and circle Barn Elms Res. before leaving S.W.

217 Common Tern

E Nazeing Meads G.P., three to four birds summered in the area. On July 15th on one of the several shingle islands at the gravel pit, an adult was seen feeding two juveniles, which appeared unable to fly. As in 1963 breeding is almost certain but not conclusive. Weald Park, seen on several dates in May and June probably on feeding visits from Hanningfield Res. (BSMs).

219 Roseate Tern

K Sevenoaks, pair of adults on July 11th (JGH). The fifth record for the London area.

222 Little Tern

E Walthamstow Res., one on Sept. 20th (REH).
 M Stanwellmoor G.P., one on Apr. 19th (DGH). Staines Res., two on Apr. 27th (JBC). King George VI Res., one on June 24th (JBC).
 K Sevenoaks, six on Aug. 17th (JMH, JGH).

223 Sandwich Tern

E Rainham Marsh, three on Aug. 14th (KN).
 M Brent Res., one on Apr. 18th (LAB), Staines Res., one on Apr. 17th and two on June 5th (JBC). Watching daily in the autumn JBC noted a total of 87 flying W. with a maximum of 38 on Sept. 24th. Queen Mary Res., 14 on Sept. 13th (BEC). King George VI Res., three on Aug. 23rd (DIMW) and three to four on Sept. 13th (CMV).
 K Sevenoaks, three adults on Aug. 5th (JMH, JGH).

224 Razorbill

S R. Thames at Chiswick, one on Sept. 2nd diving and swimming upstream (MHT).

232 Stock Dove

Although recorded during the winter months, only breeding season records are given.

- E Hainault, five pairs bred (ACP). South Weald, two males in June and July. Rainham, one in June and July. Epping Forest, one on July 12th. Navestock Park, two on Aug. 30th (DEW).
- H Hilfield Park Res., two on Apr. 11th (BLS). Old Parkbury, one on June 13th, five on July 22nd (EHW, BLS). Frogmore, two on June 13th (EHW). Nyn Park, two on Apr. 18th and one on May 2nd and June 13th (TJ, JL). Newgate Street, one on May 9th (JAH). Rye Meads, two on Apr. 8th and 19th (RMRG).
- M Osterley Park, one pair; Staines Moor, two pairs (DGH). Northolt, two on Apr. 11th (IGJ). King George VI Res., five on Apr. 5th (PC). Perry Oaks S.F., two on May 18th (CAW). Inner London: Kensington Gardens, one on May 12th and two on May 20th (RWH).
- K North Cray, one on May 4th and June 30th (CHD). Joydens Wood, pair on May 10th (CHD). Dartford Creek, pair on May 15th (CHD). Ruxley, one on May 28th (FJH). Danson Park, one on June 10th; Chislehurst, pair on June 27th (CHD). Swanscombe, three on Aug. 15th and 17th (FJH). Lullingstone Park, pair present (KHP). Chevening Park, three pairs present (KHP). Downe, one on July 1st (PMW). AWB reports that the species has now vanished from the Hayes district.
- S Morden Park, two on Apr. 15th and 17th (RF). Weybridge, five on Apr. 18th (GHG). Painshill Park, nest found with two eggs on May 2nd (WRI). Woldingham, one on May 9th (AJH). Holmethorpe G.P., two on Aug. 2nd (RF). Richmond Park, pair displaying on Mar. 21st (CES).

234 Woodpigeon

On Jan. 13th over Lambeth 73 were noted flying S.E. after a snow-storm.

The breeding season started early with a nest and two eggs in Archbishops Park on Mar. 2nd and on Apr. 21st a nest, only five feet from the ground and a foot below an occupied nest of a Song Thrush, was found in a holly bush. At Green Lane, Morden PAD noted at least twelve pairs nesting along a quarter mile of the road.

Late November and December dates figure prominently in the records but the picture is confusing; one observer had birds flying in opposite directions on the same day, another observer had birds going N.W. one day and S.E. on the next. Some of the larger movements included 1,500 going S. over Highgate on Nov. 23rd (MT), c. 3,000 flying S. high over Lambeth on Nov. 25th and c. 6,000 in four flocks two days later (GHG). Also on this day an estimated flock of 10,000 flew south over Broomfield Park. At Brent Res. on Dec. 4th, 1,000 birds flew S.S.W. followed two days later by 4-5,000 flying S. over Hilfield Park Res. (BLS, LAB).

235 Turtle Dove

Records received indicate that this species is well distributed in suitable areas in Essex, Kent and Surrey. The reverse appears to be the case for Herts. and Middlesex. Twenty five birds at Maple Cross S.F., on Aug. 22nd (MC) was the only record received from Herts. and Middlesex could do little better with only a pair at Perivale during the summer and singles at Potters Bar and Kenwood on May 29th and June 8th respectively (PMS, MT, RFS). It seems unlikely that this reflects the true position in these counties. Inner London fared better with one in Archbishops Park on Sept. 2nd (GHG) and up to six in Regent's Park from Apr. 16th to June 21st (DIMW). In Kent RVW described the species as common or very common during the summer in the Darenth Valley and reports came from another 13 localities. In Surrey it was reported from 22 localities spread mainly along the North Downs where AME described it as plentiful but LWC at Farleigh noted fewer this year.

Collared Dove

The spread of this species continues with definite breeding records from Essex, Middlesex and Surrey.

- E Valentines Park, at least one on Feb. 4th (JM). Romford S.F., one on Apr. 26th (RRS). Sewardstone, one on Nov. 3rd (BSMs). Great Warley Village, one on Nov. 21st (RBW). Shenfield and Hutton, three pairs bred; a maximum of 23 by the end of the year (APS).
- H Goffs Oak, one on Apr. 18th (RAB). Chorleywood, at least four present all the year (PT).
- M Heston Churchyard, one very young bird found dead on May 5th and one fully fledged seen on Aug. 2nd; Harmondsworth, four during summer (DGH). Cranford, two on Apr. 19th (RSD). Osterley, two on June 28th (JHB). Rear Staines Town Hall, two on Sept. 29th (LMPS). Singles were seen at Highgate, Potters Bar, Hampstead, Perry Oaks S.F. and Staines in the months of January, May, July and December (mo).
Inner London: Kensington Gardens, one on Jan. 3rd (AHHH). Regent's Park, three flying W. on May 7th, five flying W. on May 13th and one on May 27th was grounded in fog (DIMW).
- K Sevenoaks, one on May 13th (JMH, JGH). Hobbingwell Wood, St. Pauls Cray, one seen and heard on Aug. 3rd (KHP).
- S Nork Way, Banstead, bred unsuccessfully and up to five birds from Mar. 13th until the end of the year. Sutton, often seen in the Downsway area but actual numbers difficult to judge owing to the size of the surrounding gardens; three or four were in roadside trees on Mar. 7th; possibly three pairs were present (PAD). Burdon Lane, Cheam, one pair bred rearing two young (MGe). At a chicken farm near Banstead birds were present from May 5th onwards. Up till Aug. 6th never more than six were recorded but on Aug. 11th 40 individuals were counted including at least two with indistinct collar marks suggesting birds of the year. Four days later the number had dropped to 26 of

which 15 had a slightly mottled plumage. Up to six Turtle Doves had been seen at this site in May and June and may be connected with a statement by the owners of the farm that up to a hundred Collared Doves had been present in early August (RHBf, JAF). Purley, one pair resident through the summer and autumn (PD). Reigate, DW was informed by two reliable observers of at least six birds wintering. Carshalton, up to five on dates in May and July (RF, AME). Farleigh, two near farm buildings on July 14th. (There was an unconfirmed report of eight here during the summer) (LWC). Isolated records came from Beddington S.F., Riddlesdown, Addington and Tatsfield in September, October and December (mo).

237 Cuckoo

Although a good spring for Cuckoos in some localities this was not reflected by a correspondingly high number of juveniles seen. A "good year" with nine heard in one small area of Epping Forest (BSMs) was the summary received from Essex. The only record from Herts. was of a rather high number of twenty heard calling (no females) at Broxbourne Woods on May 14th (PFB). "Numbers normal" was the comment from N.W. Middlesex by EHW and Inner London did well with nine records from the parks mainly between May 10th and May 18th (mo). Observers in Kent noted the bird at ten localities but did not mention any population trend. On the other hand comments from Surrey varied from a "slight increase" in the North Downs (AME) and "fairly numerous" in the Bookham and Effingham Common districts on May 20th (GCG) to "very scarce, big decrease" in the Weybridge and Addlestone area (GHG). Mickleham and Headley Heath, GMC recorded it less frequently for 1964.

241 Barn Owl

As the decline mentioned in previous *L.B.Rs.* appears to be continuing all records are given.

- E Rainham, one pair bred (DB). Barking, one pair bred rearing one young (KB).
- H Cheshunt Common, one pair in the breeding season (JAH).
- M Ruislip Res., one on Feb. 1st (BPP). Mill Hill, at least two from Oct. to Dec. (EHW). Osterley Park, pair present but "not located till later in the year" (DGH).
- K Elmers End S.F., one on Apr. 5th (PM).
- S Farleigh, one in Mar. and Apr. (LWC). West Ewell, singles seen from May to July (IRB). Beddington S.F., two on several dates through the year (BRS). Wey Manor Farm, one on Dec. 14th (GHG). Sanderstead, two on Dec. 28th (CDH).

246 Little Owl

Recorded from all counties and is probably holding its own. Essex had records from several localities including six pairs breeding in the Hainault area alone. The only county without definite breeding

records was Herts. although birds were seen at four sites in the breeding season. Eleven pairs at nine localities were reported from Middlesex and at least four pairs were noted in Bucks. at Black Park. Kent only had one definite breeding record but birds were seen at a further eight localities. It is presumed to have bred in at least seven areas in Surrey and HEP reported that the species "appears to be maintaining its numbers" in the North Downs Area.

247 Tawny Owl

Widely reported from all counties except Herts. from which there was not a single observation submitted. An observer (RWG) from Middlesex reported a slight decrease in numbers and comments from Surrey included "maintaining numbers" on the North Downs (HEP), heard and seen less in Banstead Wood (LRK) and "half as many as 1963" in the Ashted area (FJH, BMH). On May 18th in Selsdon Wood JEH found a bird headless and lying on a bed of flattened bluebells at a Badgers sett. All records for Inner London are given. Inner London: Archbishops Park, one roosting in holly in early Oct. (GHG). Holland Park, one pair bred successfully; Notting Hill, seen and heard throughout the year (EPB). Kensington Little Boltons, one pair bred successfully (BP). Bloomsbury, one at both ends of the year (EHW). Regent's Park, at least three present (DIMW).

248 Long-eared Owl

E South Weald Park, one on Dec. 12th and 13th (CRW, RAS).

249 Short-eared Owl

E Girling Res., one on Feb. 1st, Mar. 22nd, Apr. 11th and Sept. 13th (JF). Aveley Marsh, one on Apr. 15th was put up by a fox which was seen to jump into the air in a futile attempt to catch it (AFH). Rainham Marsh, one on Dec. 17th (KN).

S Simple Marsh Farm, Chertsey, one hunting over farmland just before dusk on July 22nd (DGH, MS). Full details have been received of this record.

252 Nightjar

Breeding season distribution is given.

E Ongar Park Wood, one pair and probably two other singing males on June 8th (JTS, DELW), three heard and seen on July 1st and 2nd (SH, HR). Warley and Thorndon areas, two on June 16th (ETL) and two to three churring in a slightly different area on June 26th (TJL, PE).

H Broxbourne Woods, six churring in Broad Riding and Dane Wood on May 26th and June 17th (EHW).

B Black Park, one pair in the breeding season (DGH).

K Joydens Wood, one to two on six dates (mo).

S Banstead and Walton Heaths, at least four males and two females (mo). Esher Common, one pair seen and heard in June (MC, PJO). Farleigh, one churring on June 25th but not subsequently (LWC).

Limpsfield Chart, one male on May 17th and 23rd (RF, ADB). Princes Coverts, one churring on three dates in May and June (IRB).

255 Swift

The first birds of the year appeared about the usual time with 15 at Staines Res. on Apr. 22nd with further arrivals at five other localities in the next four days. The only notable spring flocks were reported from Rye Meads with a maximum of 500 on May 7th. The autumn migration was back to normal this year (see *L.B.R.* for 1963) although only two observers noted any major movement. This was on July 26th when IRB counted 1,200 plus flying S.W. over West Ewell on an 800 yard front from 18.30-19.00 hrs. and AME noted a "major southerly movement" over Epsom Downs. There were seven records, mostly of single birds, spread through September and GHG saw 17 flying S.E. in fifteen minutes over Weybridge on the 12th. For lateness, however, pride of place must go to a bird hawking at roof top level over Eaton Place, Belgravia, at 13.35 hrs for about five minutes on Nov. 26th (LMB). This is the latest date recorded for the London Area.

258 Kingfisher

An encouraging increase over 1963 in breeding records and with observations at other localities increased from 25 last year to 38 in the current year, the outlook for the species is more hopeful. All breeding season records are given.

- E Hainault Lake, one on Apr. 23rd (ACP). Fishers Green, one on Apr. 19th (JCE). Nazeing, one on May 10th (RSTJ).
- H Park Street, Frogmore, pair present through June (ASK, EHW). Cuffley, one on June 13th and July 9th (JJ, TJ). Troy Mill, one on May 3rd (IGJ). Rickmansworth, one on June 28th (BPP).
- M Kempton Park, one on Apr. 12th (WRI). Southgate, one flew east over observers' garden on May 19th (FJL).
- K Darenth G.P., one pair bred, the third brood leaving the nest on Sept. 18th and 19th (FJH, RVW). Sevenoaks, one pair bred, but nest destroyed by vandals during May; Sundridge, one pair during Apr. (JMH, JGH). Ruxley, one on Apr. 26th, May 6th and 7th (KHP).
- S R. Mole at Cobham, one pair bred successfully (GHG, EJC, WRI). East Molesey, one on May 28th and 29th and June 1st and 3rd.

261 Hoopoe

- K Sevenoaks, one on Apr. 19th (JMH, JGH). Ruxley G.P. one on Apr. 25th (FJH).

262 Green Woodpecker

Several observers in Middlesex and Surrey reported the species as present but still rather scarce. It was not unnaturally recorded breeding from the other counties but comments on population change were lacking. JæRK at East Molesey recorded none till August, one

in each month Sept. to Nov. and seven individuals in December. At Wallington KDGm noted it as "still absent since the 1962/63 winter". There were no Inner London records.

263 Great Spotted Woodpecker

Widespread and probably still gaining ground after the effects of the 1962/63 winter. Observers' comments varied from "widespread and common" in the Weybridge area (GHG) to "numbers below normal" in N.W. Middlesex (EHW) and a "decline, more marked each year" at East Molesey (PJO). Inner London: recorded during the year from Archbishops, Hyde, Regent's and Holland Parks. A pair was present in the breeding season in Holland Park but success is doubtful (EPB).

264 Lesser Spotted Woodpecker

Reported from 54 localities. Breeding pairs or evidence of breeding were noted at Epping Forest (4 pairs), Hainault Lodge, Aldenham Res., Osterley Park, Harrow Weald, Scratch Wood, Perivale Wood, Foots Cray, Lullingstone Park, North Cray, Kingston Vale, Richmond Park, Weybridge Heath, Brooklands Technical College and Painshill Park.

At Berrylands S.F. on Feb. 8th WRI watched two birds feeding on dead plants. They kept to an area of ground near a row of small elm saplings to which they flew if disturbed. On returning to the plants which were Mugwort and Hogweed it was noticeable that they selected the tallest and thickest stems. On examination the observer found that some stems had been pecked through and some untouched stems contained small insects.

265 Wryneck

Present in the breeding season at 17 localities classified as follows:

	South of the Thames	North of the Thames
Breeding proved	1	—
Probably breeding	9	—
Possibly breeding	6	1

In addition there were two records of migrants in spring and one in autumn, all south of the Thames. All records for 1965 would be welcomed.

271 Woodlark

For the first time since 1943 no pairs were located in the Area. All records are given.

H One near Northaw on July 12th (JAH).

S Weybridge, three on Sept. 20th, four at St. George's Hill Golf Course

on Nov. 28th and three there on Dec. 5th (GHG). Wimbledon Common, one on Dec. 25th (CRAC).

272 Skylark

On Jan. 13th, following snowfalls during the night and the previous day, a small scale movement developed, 500 per hour flying S. at Staines up to 12.00 hrs., 600 N. or W. at Chislehurst between 07.30 and 10.15 hrs. and smaller numbers at Dollis Hill, Danson Park and North Cray.

On Jan. 18th there were *c.* 1,000 at Northolt and a week later up to 2,000, decreasing to *c.* 200 by Mar. 21st (IGJ).

In autumn, a movement was noted on Oct. 19th with *c.* 360 per hour at Chislehurst and smaller numbers at Ruxley, North Dulwich and East Molesey. Hard weather movements occurred again from Dec. 25th to 27th but on a much smaller scale than in January.

274 Swallow

On July 31st *c.* 20 juveniles were roosting in bracken at Walton Heath (AME).

There were two November records, two at Elmers End S.F. on the 2nd (TK) and one at Weybridge on the 21st (GHG).

275 Red-rumped Swallow

One at Ruxley G.P., Kent, on Apr. 25th was the first recorded in the Area (HBN, RHQ, FJH, GT). Accepted by the *B.B.* Rarities Committee.

277 Sand Martin

The bird ringed at Figuig, Morocco, on Apr. 5th, 1963, and retrapped at Sevenoaks on June 7th, 1963 (see *L.B.R.* No. 28 for 1963) was again retrapped at Sevenoaks on June 20th, 1964.

The number of occupied nest holes at the Holmethorpe G.P. colony was estimated at between 450 and 500 by AME on July 5th.

281 Hooded Crow

M Inner London: one flying N. at Primrose Hill on Apr. 5th (DIMW) was the only record for the Area.

282 Rook

M Inner London: Regent's Park, one or two on Mar. 20th and 22nd and Apr. 12th (RCG, DIMW).

The number of occupied nests at six rookeries at Caterham, Godstone, Tandridge, Whyteleaf, Chaldon and Chelsham was 311 in 1964 compared with 319 in 1963 (MSA).

283 Jackdaw

There was no evidence of attempts to breed in Inner London.

284 Magpie

M Inner London: Regent's Park, one on June 3rd, two Oct. 1st, one Oct. 17th and 25th (RCG, MT, DIMW).

285 Jay

- M Inner London: Holland Park, probably two pairs bred; Notting Hill, courtship feeding seen near St. John's Church on May 27th (EPB). Hyde Park, and Kensington Gardens, at least two pairs present, but no confirmation of breeding (RFS). Regent's Park, a young bird seen on Aug. 9th (RCG). Kensington, a pair bred at Little Boltons, the nest being on an external pipe on a house about 12 feet above the pavement (BP).
- K One killed by a car at Knockholt on Nov. 21st had characters of the continental race (JGH, JMH).

290 Coal Tit

- M Inner London, one pair bred successfully in Holland Park (EPB).

293 Willow Tit

Pairs were located in the breeding season as follows:

- E Weald Park, two pairs (MPT).
- H Aldenham Res., Bricket Wood and Old Parkbury, one pair at each (ASK, EHW). Eight pairs at Northaw Great Wood, two at Nyn Park and three at Cuffley (TJ, JL).
- M Mill Hill, Scratch Wood, Bentley Priory, Ruislip, and Perivale, one pair at each (PMS, EHW).
- K Lullingstone Park, two pairs; Meerfield Wood, Shoreham, one pair; Chevening, one pair (KHP).
- S Addington, at least two pairs (DS); Banks Common, one pair bred successfully (PJO); Burgh Heath, one pair (RHBF); Banstead Heath, one pair, Kingswood Warren, one pair, Walton Heath, two pairs (HB); Selsdon, three or four pairs bred (DS).

294 Long-tailed Tit

Little information was received on the status of this species during the breeding season, but the numbers reported at the end of the year suggest that some recovery has taken place. Two or three pairs were present at Bookham Common compared with none in 1963. HEP reports that it is still very scarce in N.E. Surrey.

295 Bearded Tit

For the sixth year in succession this species appeared in the Area towards the end of the year.

- E Berwick Pond, Rainham, four, possibly six, on Dec. 22nd (MJA).
- H Rye Meads, five ringed on Oct. 17th (RMRG); two flying N. on Nov. 21st (LL-E, TL-E).
- K Dartford Creek, five on Nov. 3rd (CHD). Swanscombe, nine, eight of which were trapped, on Nov. 14th (CEW).

296 Nuthatch

- M/S Inner London: Holland Park, two pairs up to April, one pair and a

single bird in May, but thereafter only single birds seen (EPB). Kensington Gardens, two pairs present one of which is known to have bred (RWH). Lambeth, Archbishop's Park, single birds on Mar. 4th and Sept. 24th (GHG).

297 **Tree Creeper**

M Inner London: one in Holland Park on Jan. 16th (EPB).

299 **Wren**

In most areas making a good recovery following the serious reduction in numbers during the 1962/63 winter.

M Inner London: Holland Park, at least three broods, one as late as Aug. 13th (EPB). Hyde Park and Kensington Gardens, at least one pair bred (RFS). Present in the breeding season at Regent's Park.

302 **Fieldfare**

The largest party reported at the beginning of the year was *c.* 110 at Beddington S.F. on Jan. 24th. In the autumn the main influx occurred from Oct. 25th to 28th, but no large numbers were involved.

M/S Inner London: a few were seen in Regent's Park from Oct. 11th to the end of the year, and small flocks flew over Archbishop's Park, Lambeth, on Nov. 11th and 20th and Dec. 4th.

304 **Redwing**

The only reports of movements during the snowfalls of the second week of January were six flying N.W. over Soho and 21 W. at Cuffley on Jan. 13th. The largest parties seen at the beginning of the year were *c.* 200 at Banstead from Mar. 2nd to 6th, and 150+ at Wey Manor Farm on Mar. 30th, where 12 on Apr. 12th were the last seen. First arrivals in the autumn were on Sept. 20th at Epping Forest and Dollis Hill. The main movement developed in the second half of October, being most noticeable on Oct. 18th and 19th, but no large numbers were reported. On Oct. 31st several hundreds were feeding along Beverley Brook on Wimbledon Common.

A hard weather movement was noted on Dec. 27th at Walton Res., S. Croydon and at Lower Morden, where 296 in flocks of from 8 to 45 flew S. between 13.20 and 15.30 hrs.

307 **Ring Ouzel**

M Ruislip, an immature male at the nature reserve on Oct. 3rd (BPP).

308 **Blackbird**

M Inner London: a pair successfully reared a brood of three in a nest built on a window sill in Romney Street, S.W.1.

317 Stonechat

Although there were more than twice as many records as in 1963, none were present during the breeding season.

318 Whinchat

Appears to be declining as a breeding species. All breeding records are given. Common on both spring and autumn passages.

- E Rainham Marsh, one pair bred (KB, AFH). May have bred at Fishers Green G.P. where an adult and a juvenile were seen on July 12th (JCE).
- H A pair bred at Elstree Aerodrome (DRB).

320 Redstart

It is not possible to compare the total breeding population with that of 1963, as no survey of Epping Forest, the main stronghold in the London Area, was made on the scale of 1963. All records of breeding and of apparently resident birds are given. An early migrant was seen at Godstone, Surrey, on Mar. 27th (CK).

- E Epping Forest, 14 pairs known to have bred in that part of the forest covered (mo). South Weald Park, a male and a juvenile on June 27th (APS, RSW). Warley, a male in song on May 30th (RBW).
- H Broxbourne Woods, a male in Broad Riding Wood on May 27th and June 17th (EHW). Northaw Great Wood, 19 pairs in the breeding season (TJ).
- K Lullingstone Park, two males singing in territories on May 4th (KHP).
- S Ashtead Common, two pairs bred (WRI). Limpsfield Chart, two or three in song on May 8th (AJH). Oxshott Heath, a male throughout the breeding season (SG). Richmond Park, four pairs considered to have bred (CES).

321 Black Redstart

At least one pair bred successfully in the Cripplegate area, and another across the River Thames in Southwark. Just outside the Inner London Area to the W. a pair bred at the White City, Shepherds Bush, and to the E. four pairs bred by the lower reaches of the River Lea. In the southern suburbs three pairs bred at the usual site at Croydon Power Station, and a pair were seen nest building at Kingston Power Station. A paper on the Lea Valley sites appears on page 91. All records are given.

- E/M Four breeding pairs and an additional six singing males in the lower reaches of the River Lea from Ponders End to the River Thames. Two of the breeding sites were in Essex (BSMs).
- M Inner London: one pair bred by Cripplegate Church, the three young reared leaving the nest in mid-June (PEF, SM, REW). In the same area young being fed on July 28th (SDH) may indicate that a second brood was reared. Another male sang in the area Queen Victoria Street-Upper Thames Street from May to July (PHFB *et al.*) and was probably the bird seen several times near St. Paul's Cathedral and Ludgate Hill.

A male sang in the area Tottenham Court Road, Euston Road, Senate House, from June 12th to 19th (RHK, EHW). One was singing on Butler's Wharf near Tower Bridge on July 5th (WIB). Outside the Inner London Area, a pair bred at the White City, Shepherds Bush, rearing three young (DWH), a male sang from the top of a warehouse at Brentford Dock from June 3rd to 5th (CAW), a hen was seen at Broomfield Place, Ealing, on Apr. 9th (FJL), and one on Hampstead Heath on Apr. 21st (MT).

- K Elmers End S.F., one on July 5th (TK). Littlebrook, an immature on June 24th and 25th (RWC, CHD). Sevenoaks, a female on Apr. 26th (JGH, JMH).
- S Inner London: Southwark, a pair bred at a bombed site in Sumner Street (ACP). Croydon Power Station, three pairs bred successfully (ADP). Croydon Town Hall, a male singing on several dates in May, June and July (AJH, AJW). Kingston Power Station, a pair nest building on June 25th (BAM) were still visiting the site on July 18th (HSB). Kingston, one to three seen in the gardens of almshouses half a mile from the Power Station from June 19th to Aug. 23rd (PAA, HSB, BAM). Barn Elms Res., one on Apr. 15th (DCG, PN, PJSn). Godstone, a hen on Mar. 27th (CK). Holmethorpe G.P., a hen on Oct. 25th (RF, JNR).

322 Nightingale

Breeding season records are given in full.

- E Epping Forest, nine singing males in June; has decreased over the last three years and is now absent from several former breeding sites (mo). Lea Valley between Sewardstone and Waltham Abbey, seven singing males (BSMs). Curtis Mill Green, two singing males on June 14th (BSMs).
- H Northaw Great Wood, nine singing males; population still low (JAH, TJ).
- M Uxbridge, one singing on May 31st (EHW).
- K Bred at Stone chalk quarry, Lullingstone Park, and Crown Wood, one pair at each (KHP). Males singing at Otford on May 23rd (PMW) and West Wickham Common May 8th to 19th (EWR).
- S Ashted Common, four males singing on Apr. 25th; possibly 8-10 pairs bred (PAD). Bookham Common, at least two males singing on May 2nd (GB). Chipstead, a male on May 26th (MJC). Epsom Common, one pair bred successfully (FCR). Esher, six or seven singing in May and June at Princes Coverts (IRB). Fetcham Downs, one singing in May and June (MLC). Godstone, three singing on May 3rd (IGM). Woldingham, one on May 14th (IGM).

325 Robin

The only comparison made with 1963 was by GB who found that in 40 acres of oakwood at Bookham Common, the number of singing males increased from 21/22 in 1963 to 32 in 1964, the same number as in 1962 before the severe winter of 1962/63.

327 Grasshopper Warbler

Breeding season records are given; a considerable increase over the 1963 figures, except for Herts from which no records were received.

- E Epping Forest, one singing on Apr. 19th and June 27th (RTB, JF). Ongar Park Wood, one singing on June 8th and July 2nd (SH, JTS, DELW).
- M Brent Res., a pair bred, rearing at least one young (LAB).
- K Badger's Mount, two singing in July (PCB). Joyden's Wood, one pair (PCB, KHP). Ruxley, one singing April to June (CHD, RWC, KHP, PMW). Westerham, one singing during the summer (PCB). Timberden Bottom, two pairs (KHP).
- S Ashted Common, three singing males May to July; one nest found (MLC, *et al.*). Bookham Common, a pair Apr. 26th, three singing males June 7th (PJO, FCR, *et al.*). Caterham, two singing April to July (RF, CK). Chelsham, two at Holt Wood, June 20th (RF). Esher, at least two singing males at Princes Coverts April to June (IRB, DP). Farleigh, one singing from April to July (LWC, AJH, IGM). Godstone, one singing on May 3rd (IGM).

333 Reed Warbler

- M Inner London, one singing by the lake in Buckingham Palace gardens on July 21st (EHW).

334 Marsh Warbler

- K One in full song in osier beds at Sevenoaks on May 19th, June 22nd to 23rd and July 18th, and one at Sundridge on July 3rd (JGH, JMH).

338 Aquatic Warbler

- K Sevenoaks, one on Aug. 21st (JGH, JMH).

339 Melodious Warbler

- E Navestock, one trapped and ringed on Aug. 10th (DGHn, JW) was the second record for the London Area. Satisfactory details have been received.

343 Blackcap

- M Inner London: Holland Park, a male singing from Apr. 16th to July 11th; a female was seen on Apr. 26th and May 27th, but breeding could not be proved (EPB).

355 Greenish Warbler

- M The second record for the London Area was of a bird identified by ES in allotments at Dollis Hill, Middx., on October 1st. Accepted by the *B.B.* Rarities Committee.

356 Chiffchaff

- H One at Stocker's Lake on Jan. 12th (IGJ).

357 Wood Warbler

Records outside normal passage periods are given.

- E Epping Forest, one pair and three singing males (JAB, RTB, JCE, JF).
- H Northaw Great Wood, of eight or nine pairs present, four at least bred (GTH, TJ).
- K Brested Valence, one singing on June 14th (RVW). Shoreham, one singing in June (KHP, RVW). Dulwich Woods, two on June 2nd (JGC, MAH).
- S Ashurst Rough, one singing on June 16th (GMC). Banstead Wood, one singing on June 10th (JAF). Bookham Common, two singing on May 31st (FCR). Chipstead, two males on June 27th; Esher, two pairs at Princes Coverts May and June (IRB). Shirley Hills, two males singing in May and early June, but no females seen (RGB).

364 Goldcrest

Very few records for the winter months at the beginning of the year, and even fewer for the breeding season, which are given in full below. Much commoner from October to December, but most of these birds were probably immigrants.

- E South Weald Park, one pair bred (MPT).
- H Two males throughout the breeding season at Northaw Great Wood (JAH, TJ).
- K Kingsdown, one building a nest on June 28th (RVW).
- S Esher Common, one singing on July 12th (PJO). Painshill Park, three singing on May 2nd (WRI).

366 Spotted Flycatcher

One ringed as a juvenile at Addington, Surrey, on Aug. 27th, 1961, was recovered on May 9th, 1964, at Wembley, Middx. (DS).

368 Pied Flycatcher

Few reported on spring passage which was restricted to the period Apr. 18th to May 1st. Much more frequent in autumn from Aug. 9th to the end of September, with a late bird on Oct. 10th.

378 Red-throated Pipit

- M Staines Res., one on Apr. 17th and 18th (JBC), was the first record for the London Area. Accepted by the *B.B.* Rarities Committee.

379 Rock and Water Pipits

Records of Rock Pipit (*petrosus*) away from the Thames marshes, and all records of birds having the characters of Water Pipit (*spinoletta*) are given.

- E Romford S.F., a Rock Pipit on Dec. 4th was trapped and ringed (RRS).
- H West Hyde, a Water Pipit on several dates from Jan. 5th to Mar. 29th, and again from Dec. 26th to 28th (MC, IGJ, BPP, HCS).
- M Rock Pipits at Queen Mary Res. on Oct. 11th and Nov. 1st, at King George VI Res., on Oct. 10th (three) and Nov. 7th and 8th, and at Staines Res., on Oct. 13th and Nov. 7th (JBC).

- K Elmers End S.F., a Water Pipit on Dec. 28th (TK).
 S Beddington S.F., a Rock Pipit on Feb. 23rd (MSA). Island Barn Res.,
 a Rock Pipit on Oct. 22nd (DP).

380 White Wagtail

As usual a few were recorded on spring passage during the period Mar. 30th to May 11th (mo).

381 Grey Wagtail

Records of breeding are given.

- H One pair bred by the River Colne at Munden Farm (ASK).
 M A pair bred, rearing at least four young, by the Dollis Brook near the
 junction of Hendon Lane and Finchley Lane (EHW).
 S Leatherhead, a pair bred by the River Mole (WRI). Wallington, a
 pair bred by the River Wandle (LWC).

382 Yellow Wagtail

All records of birds showing the characters of the Blue-headed Wagtail (*flava*) are given.

- E Romford S.F., a male on Apr. 10th (RRS).
 H Rye Meads, one on Apr. 16th, five on May 28th (RMRG).
 M Brent Res., a hen on May 30th (LAB). Staines Moor and King
 George VI Res., a hen on May 3rd and 9th (JBC).

383 Waxwing

- H Cuffley, one on Jan. 26th (JJ).

384 Great Grey Shrike

- E Hainault Forest, one on Dec. 23rd (RJL, SDW).
 K Sevenoaks, one on Mar. 7th (EAG). Joyden's Wood, one on Oct. 25th
 (CHD).
 S Epsom Downs, one at Langley Vale on Jan. 18th (BMH, FJHt). Walton
 Heath, one from Feb. 2nd to 18th (RF, AJH, JNR).

388 Red-backed Shrike

Although the distribution changed a little, the breeding stock showed little change on 1963. Only proved breeding or pairs present in the breeding season are given.

- E Grays chalk pit, one pair bred, rearing two young (CESI).
 H Watford, one pair bred, rearing two young (JDM, MW).
 K North Cray, a pair on several dates in June (CHD). Otford, one pair
 bred (HFG, JGH, JMH). A pair bred in a North Kent chalk quarry
 (KHP). A pair behaving as if with young out of the nest on July 10th
 in a North Kent sand pit (CEW).
 S Banstead, a male with a juvenile on July 17th (AME). Bookham
 Common, one pair bred (GB, FCR). Epsom Common, one pair bred
 (MJC, RFP). Farthing Downs, a pair in June and July, but no evidence of
 breeding success (MJCd, RFP). Leatherhead, one pair bred, rearing five

young (MLC). Old Coulsdon, one pair bred, rearing at least one young (RF, JNR). Riddledown, one pair reared four young (PAD, MSA). Tadworth, one pair bred; one juvenile seen (AME). Warlingham, one pair bred, rearing four or five young (PAD). Whyteleafe, one pair with five young in July, and a second pair in the same locality (MSA).

389 Starling

On Jan. 12th, a day on which snow fell, there was a big passage to S.W. and W. of birds flying very high at Walton Res., from 08.00 to 09.30 hrs (GHG). The following day, KHP saw 200 flying N. and 64 W. at Chislehurst.

Autumn passage was noted on a number of dates from Sept. 23rd to Nov. 6th with the peak from Oct. 19th to 21st. The largest counts were 4,000 W. in 25 minutes at N. Cray on Oct. 19th (CHD), and 2,000 W. at Weybridge on Oct. 20th (GHG).

391 Hawfinch

Breeding season distribution is given.

E Epping Forest, at least two pairs probably bred (RTB, BSMs, FR). South Weald, one on June 27th (RBW). Wanstead Park, one on June 14th (REH).

H Cuffley, a pair with one young on June 25th (JJ); a flock in a built up area reached a maximum of 14 on July 11th (TJ, IJ). Northaw Great Wood, seven or eight pairs of which three pairs had young on June 20th (TJ). Ponsbourne Park, one pair (JAH).

M Perivale Wood, one pair (PMS).

K Two at New Year's Wood on May 17th (RVW).

S Recorded at ten localities in March and April, but thereafter only at Caterham in May (CK) and Holmwood, one on June 14th (FFBM).

392 Greenfinch

BHH trapped and ringed 110 in a small suburban garden at Highgate West Hill from Jan. 4th to Feb. 23rd. Several observers reported flocks of over 100, the largest being 400 at Farleigh in October (LWC). This species appears to be increasing.

394 Siskin

Numbers were small at the beginning of the year, but increased towards the end of March. On Mar. 25th there were 40 at Oxshott Heath (SG), and 50+ at Painshill Park (DP). At the end of the year, numbers were again small except at Sevenoaks, where there were 70 on Dec. 16th (JGH, JMH).

396 Twite

M Brent Res., a hen on Mar. 23rd (LAB).

K Sevenoaks, 22 on Apr. 2nd (JGH, JMH).

397 Lesser Redpoll

Breeding season distribution is given.

- E Epping Forest, two on May 26th (DELW). Ongar Park Wood, three pairs, June and July (DELW, SH). Warley Gap, two on July 4th (RBW).
- H Northaw Great Wood, a pair with young on May 23rd (EHW). Rickmansworth, two in song flight on June 20th in Moor Park (MC)
- M Bentley-Priory, two pairs bred (EHW). Stanmore Common, a pair on June 11th (PFB).
- K Badger's Mount, two pairs and a juvenile in July (PCB). Marlings Park, three pairs in the breeding season (KHP).
- S Ashstead Forest, at least four pairs bred (IRB). Esher Common, a nest found on July 19th, and about four other singing males near by (WRI). Esher, four pairs at Princes Coverts in June (IRB). Oxshott Heath, two pairs in song flight on June 13th (SG). Bookham Common, two males held territories (GB). Chelsham, one pair bred in a small larch plantation (HEP). Banstead Downs, five or six on June 14th and 30th (RFP). Banstead Heath, one pair in the breeding season (HB). Headley Heath, three pairs on June 25th (JAF). Walton Heath, *c.* 10 pairs bred (PAD).

404 Crossbill

Recorded in every month of the year except June and December. In the first half of the year, numbers only exceeded seven at Golding Wood, Herts, maximum 20, last seen Mar. 6th, and at Oxshott, maximum 50 in April. Much less common in the second half of the year, maximum 17 at Weybridge on Sept. 9th. All records are given.

- E Epping Forest, three on Apr. 12th (FR).
- H Golding Wood, 20 last seen on Mar. 6th had spent the winter in the wood (DDL). Northaw Great Wood, five on Feb. 9th (TJ, JL); three on July 14th and four on Aug. 4th (JAH). Rickmansworth, four on Feb. 22nd and three on Mar. 7th (IGJ). Totteridge, several on Sept. 7th (EHW).
- M Stanwell Moor G.P., one flew S.W. on Apr. 19th (DGH).
- B Black Park, one on July 19th (DGH).
- S Banstead, Nork Way and Nork Wood, up to seven from Jan. 16th to Mar. 1st; one on four dates from Aug. 28th to Sept. 27th, five on Oct. 18th (mo). Bugshill, a female on Apr. 27th (RF). Chessington Zoo, a male on Feb. 8th (SG). Fetcham Downs, four on Jan. 25th, three on Feb. 2nd (TLB). Kenley, one on Feb. 9th and 10th, three on Mar. 20th (RF). Kingswood, a male on Apr. 14th (MSA). Mickleham, three on Feb. 2nd (LR). Reigate, six on Jan. 2nd, one on Apr. 17th (DW). Walton Heath, three on Mar. 26th (SG). Oxshott Heath, seven on Jan. 19th were joined by another 20 on the 25th; only three were seen in February, but on Mar. 23rd there were *c.* 30, and on Apr. 12th, 18th and 25th *c.* 50; 20 on May 30th were the last seen (BEC, SG, RAH). Esher, five at Princes Coverts on Feb. 9th (DP).

Weybridge area, five on Feb. 16th and up to six in April; 11 on Sept. 2nd, 17 on the 9th and nine on Nov. 28th (GHG, DAB).

407 Chaffinch

Five observers in Middx., Kent and Surrey noted a large scale movement to W. and N.W. on Oct. 19th. The total counted was 2,478, but as the movement was on a broad front, a vast number of birds must have been involved. Again on Oct. 25th, 2,381 were counted by three observers in Middx. and Kent, moving in the same direction.

408 Brambling

Rather scarce at both ends of the year, the largest flock being only 35 at Cuffley on Mar. 28th (TJ).

410 Corn Bunting

Breeding season distribution is given.

E Hainault/Fairlop area, ten pairs located during a census (ACP). North Ockenden, 23 singing males found during a census of birds within a three mile radius of the observer's house (MJA). Rainham, a male on May 10th (AFH).

H Northaw, a pair on May 30th, but not seen later (TJ). Shenley, one on May 21st (BSMs). West Hyde, two singing in June (IGJ).

M Northolt, one on May 2nd (IGJ). Perry Oaks S.F., one singing on May 20th (PAD). Potters Bar, two present throughout the breeding season (MPI).

B Denham, one singing on May 17th (MC).

K Dartford Marshes, two singing males on June 24th (RWC). Stone chalk quarry, two singing males in the breeding season (KHP). Observations carried out by KHP and RVW indicate that there were between 20 and 30 singing males during the breeding season in the area on either side of the Darent Valley from Darent to Lullingstone.

423 Snow Bunting

M King George VI Res., adult males on Nov. 8th and 29th and Dec. 20th (JBC, SG). Queen Mary Res., an immature male on Dec. 26th (JBC).

S Barn Elms Res., two on Nov. 8th (PJSn).

424 Tree Sparrow

Additions to the breeding distribution given in the *L.B.Rs.* No. 27 for 1962 and No. 28 for 1963 are given.

E Hainault Lodge, 20 pairs (ACP).

H Northaw Great Wood, c. 15 pairs (TJ). Northaw parish excluding Great Wood, c. 73 pairs (JAH, TJ). Ponsbourne Park, five pairs (JAH).

M Hampton Res., two or three pairs (EJC, DRI). Scratch Wood, three small colonies (GCG). Hanwell, four pairs (PMS). Potters Bar, at least eight breeding sites (RFSn).

K Lullingstone Park, 58 pairs; Lullingstone Villa, six pairs; Hulberry, 20 pairs; near Hulberry, two pairs (KHP). Badger's Mount, three pairs (PCB). Ruxley, one pair (CHD).

S Ashted Common, three pairs (WRI).

Additions and Corrections to the London Bird Report, 1963

- 64 Common Scoter**
The entry for Kent should read:
K Ruxley G.P., a drake on Aug. 4th and 5th (CHD, FJH). Sevenoaks, a drake flew west on Dec. 28th (JGH).
- 105 Peregrine**
The bird at Ruxley, Kent, was seen by BE not FJH.
- 161 Redshank**
K Swanscombe, in addition to the nest already recorded, two or three other pairs probably bred.
- 166 Marsh Sandpiper**
E Rainham and Aveley Marshes, one from Aug. 26th to 28th (BK, KN *et al.*) has now been accepted by the *B.B.* Rarities Committee. It was presumably the same bird as that recorded at Swanscombe during the period Aug. 26th to Sept. 3rd as the two localities are not far apart.
- 187 Grey Phalarope**
The bird at Wanstead Park lakes was seen on Nov. 14th not Sept. 14th.
- 200 Herring Gull**
M Inner London: a pair bred in Regent's Park (RCG).
- 211 Kittiwake**
M King George VI Res., an immature on July 31st (BVMO).
- Collared Dove**
S Chicken farm near Banstead, four adults and two juveniles on Sept. 21st, 1963. (RHB).
- 259 Bee-eater**
M Staines Res., one on Apr. 30th (ADP). Accepted by the *B.B.* Rarities Committee.
- 303 Song Thrush**
S One ringed at Farleigh on Sept. 16th, 1962, was found dead at St. Mawgan, Cornwall, on Dec. 1st, 1963.

The Food Of Tawny Owls In London

By GEOFFREY BEVEN

THE food of the Tawny Owl *Strix aluco* L. has been studied by examination of the pellets. Collections of pellets from three different habitats in the London area have shown that the owls feed mainly on birds in Central London (Holland Park), and mainly on mammals 20 miles out from the centre (oakwood at Bookham). In a suburb between (Morden) there is a more mixed diet of birds and mammals.

Owl "pellets"

Gilbert White (1789) wrote of the Brown or Tawny Owl, "I find that it casts up the fur of mice, and the feathers of birds in pellets, after the manner of hawks". Elsewhere it is stated "except when altogether too large, prey is generally swallowed whole, instead of picked, as is usual with the true diurnal birds of prey . . ." (Witherby *et al.*, 1941). When dry the pellets are usually grey in colour and very friable. They vary greatly in size, from 21 to 80 mm. in length and from 13 to 36 mm. in width in my sample series. They can be roughly classified as "fur" and "fibre" pellets. When dissected the "fur" type is found to contain the skulls and other bones of the vertebrates, usually mammals or birds, with hair or feathers and often the "stomachs" of birds. Skulls are usually broken especially at the back and the mandibles are often broken into two or more pieces. The long bones are also usually broken and small ones may occasionally be decalcified. Nestlings less than a month old are said to be able to decalcify most bones eaten (Gilliard 1958). The larger the skulls or bones the more likely they are to be broken into several fragments, for example, the humerus of a pigeon is often broken into three pieces or more. The "fibre" pellets are usually smaller and consist of earth and the chaetae of earthworms (Southern 1954). I have only examined a few of these microscopically, but chaetae were found in them. It is always worth looking at the "fibre" pellets for small mammal bones which may sometimes be found. Remains of insects are not infrequent, especially beetles.

In addition there is often some packing material such as leaves or vegetable fibres, small twigs (half-inch long) and grasses. This material would bind the pellets together especially in the absence of fur or feathers. Maxwell Knight (1956) used to give loose feathers if he fed his Tawny Owl on raw meat, but tow would also be used quite regularly. However, Råber (1949) found that green parts of plants were sometimes swallowed even when there seemed to be no lack of "binding" material. When pigeons have been eaten it is not uncommon to find undigested seeds including wheat grains in the pellet, presumably from the crop of the pigeon.

Occasionally a few small pebbles were found adhering to the outside of the pellet, no doubt as a result of the fresh damp pellet falling among the small stones, but on at least one occasion I have found several small pebbles in the centre of a pellet so that these must have been swallowed by the owl, some probably by accident. Two of these ingested pebbles measured $2 \times 1 \times 1$ mm. and $2 \times 4 \times 2$ mm.

The Tawny Owl seems to produce one or two pellets each day. (Southern 1954, Witherby 1941). The pellets are usually cast before going to roost so that relatively few pellets are found below the roosting sites. They are mainly found below special pellet-dropping stations in certain trees especially evergreens, but the station is often changed at different seasons. Throughout these investigations attempts have been made to collect all the pellets at each visit, so that any found subsequently may be approximately dated. In the Holland Park and Morden series it has been possible to pay frequent visits at weekly or fortnightly intervals, so that the dating of the pellets should be fairly accurate. In the dense oakwood at Bookham the pellet-dropping sites are frequently changed and new ones were only found with difficulty after longer intervals. Hence any data for seasonal variation in the Owl's diet at Bookham cannot be regarded as of equal accuracy to the data obtained from Morden and Holland Park. However, newly dropped pellets would predominate in any collection so that the results may well give a rough estimate of the seasonal variation and the results from Bookham do show remarkably similar seasonal trends to those obtained by Southern (1954) in a much more extensive investigation in oakwood at Wytham, Oxford (Fig. 1).

When the young birds are being fed, partially eaten bodies of small mammals and birds may be found near the roosting sites of the young and these carcasses are often headless. When it is reasonably certain that they have formed part of the prey of the Tawny Owl, these items have been included in this study.

Pellets frequently contain the complete skeletons of the smaller creatures, such as mice, voles, sparrows and even thrushes, suggesting that the prey has been swallowed whole. Two pellets found in oakwood contained the remains of seven Bank Voles and two Wood Mice. In the case of larger mammals, such as rats, and pigeons, there may be only a few bones, such as vertebrae or limb bones, in one pellet, presumably because pigeons and probably the larger rats were not swallowed whole. Räber (1949) observed that when a mouse is eaten the head is generally separated and swallowed first, but now and then a small mouse is swallowed whole.

Method of Study

After collection and dissection of the pellets the numbers of the different species of prey are counted. In order to estimate the proportion of the different animals in the Owl's food, some correction is needed for their unequal size. The method used by Southern (1954) is adopted here. The mean weight (20 grammes) of a small mammal is taken as one "prey unit", and the numbers of individuals of the other animal species are multiplied by the ratio of the weight of each species to the prey unit (conversion factor).

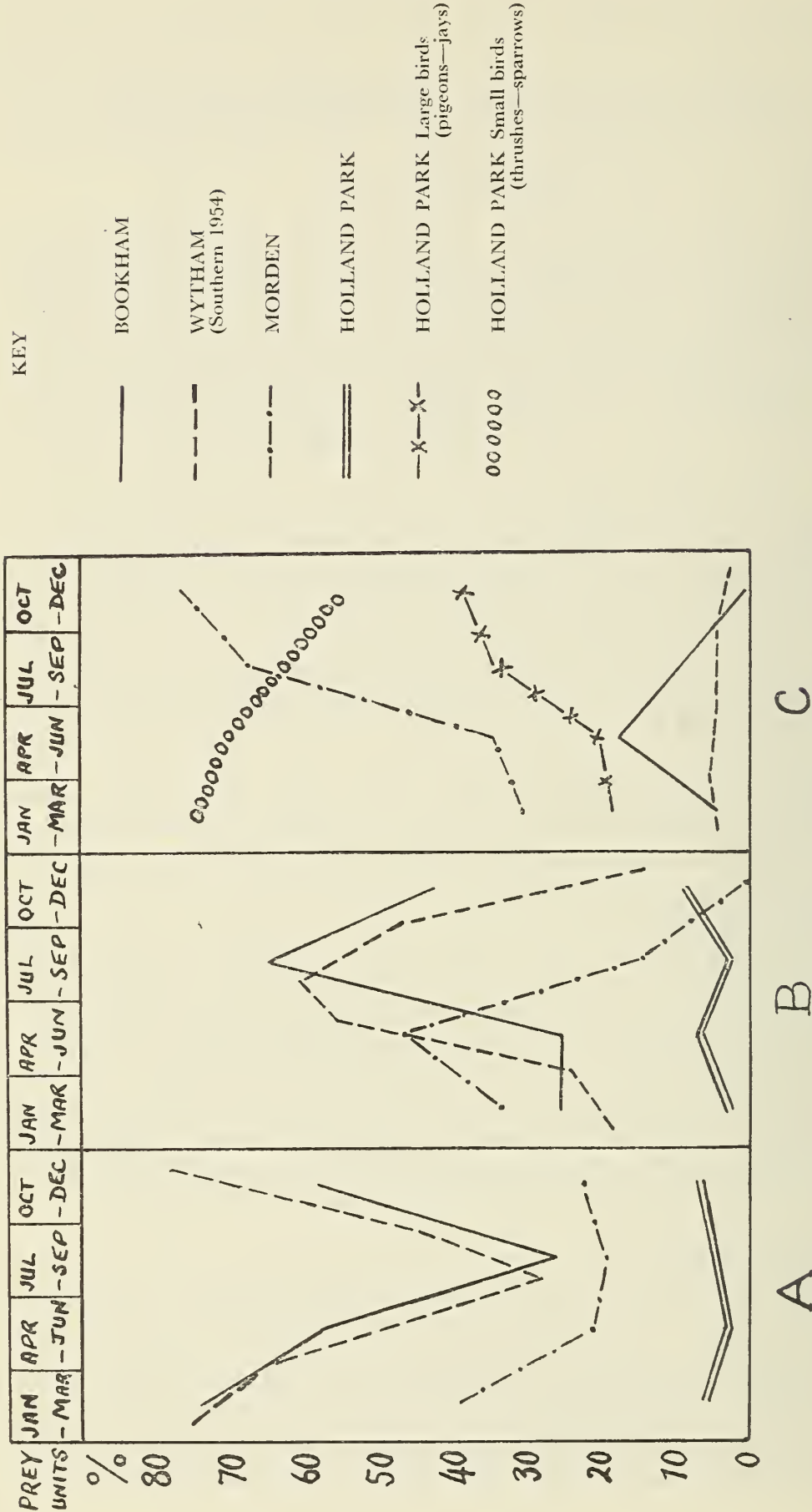


FIGURE 1. SEASONAL VARIATION IN FOOD TAKEN IN DIFFERENT HABITATS
 A = Small mammals including Wood Mouse, House Mouse, Field Vole, Bank Vole, Shrews.
 B = Large mammals including Brown Rat, Mole, Rabbit.
 C = Birds.

The quantity of each species is then expressed as prey units and also calculated as a percentage of the total prey units. Small mean weights are taken for larger prey such as Rabbit (200 G), Brown Rat (100 G), Jay (180 G), Feral Pigeon (200 G), Stock Dove (200 G) and Woodpigeon (300 G), as it is considered that young individuals only are taken; Southern believes that any larger Rabbits or Rats would be too heavy for the Owls to tackle. In addition some of the larger individuals cannot be swallowed whole and must be dismembered. Thus it is likely that all the prey was not eaten.

Methods of Hunting of Tawny Owl

The Tawny Owl seldom emerges before dusk and usually hunts in woods or near trees. The prey is often taken on the ground and Meinertzhagen (1959) describing it as mainly a nocturnal still-hunter, states that the bird glides or drops like a stone on a victim from a perch and at the moment of impact will extend its wings either to cover the victim or strike him, and may then return to its stance. He also describes how an Owl will pounce down into a Rhododendron containing Starlings, from a tree overlooking them. Southern (1954) found, in a plantation, a number of bare boughs of larches which had been used as night perches, presumably from which to pounce on prey. Faeces either close to the trunk or wide of it, marked these perches, but pellets were not found under them. In my garden at Morden bird food left lying on the ground was often visited by Wood Mice at night and on occasion I have disturbed a Tawny Owl from its perch on a rose arch nearby, presumably waiting to pounce. Once, after hearing a shrill scream, I hurried to the spot and found an injured rat, which died almost at once. In the same garden in January 1955 when snow lay on the ground, a Tawny Owl sat on a bare branch in full view at dawn, watching the tits and thrushes at the bird table. A more unusual method of feeding is described by a correspondent in *The Times* (1964): "The strangest follower of the plough is a Tawny Owl. It waits in a thick hedge at the side of the field and every time I pass flies out to search the new furrows, mingling oddly with the gulls. After examining a few yards of earth it returns to its perch to wait for the tractor to pass again".

This last example shows that on occasion the Owl will hunt in full daylight. Miss Evelyn Brown, who has considerable experience of Tawny Owls in Holland Park, thinks that when there are young in the nest, the adults are often active during the early morning hours of daylight. She tells me that Keeper R. Barker surprised an owl carrying a young Woodpigeon there on May 27th, 1961 at about 8 a.m. The owl dropped the pigeon which must have been a heavy load for it.

Birds may be driven out from their roosting places by the owl beating its wings on bushes or trees, and then possibly seizing the bird as it tries to get away in the darkness. But it is apparently unknown whether owls can catch flying birds. Captive Tawny Owls only caught living sparrows when they had perched somewhere (Räber 1949). It will sometimes hover for a few seconds while investigating likely bushes (Witherby 1941). It has been suggested that House Sparrows are not taken so frequently as other birds because of the sparrow's habit of roosting in bushes with a dense growth of

twigs, which the owl cannot easily penetrate (Guichard 1957). However, this investigation shows that the owl is certainly able to obtain sparrows in considerable numbers. Derek Goodwin (in litt.) informs me that these owls are a great curse to the aviculturist who keeps small foreign pigeons at liberty particularly species of *Streptopelia*, and he states that they tried to get at his Jays through the wires of the aviary. He mentions that if he handled a bird at night and it screamed, the local Tawny Owl was often on the spot in a moment.

Tawny Owls are known to take birds from their nests, as for example, incubating hen Blackbirds (Snow 1958, Harrison 1960), Woodcock (Meinertzhagen 1959), and young and incubating female Stock Doves from nest holes (D. Goodwin, in litt.). Harrison (1960) considered they also probably take nestling Woodpegeons.

"In the owls . . . the taloned feet are used to seize and often to kill the prey; if the formidable grip or lacerating impact be not sufficient to give the coup-de-grâce, the bill comes into action usually attacking the base of the skull" (Hartley 1964). The observation that most skulls in pellets are broken at the back could thus be easily explained. However, the muscular strength of the gizzard may also be a factor in breaking the thin bones of the skull vault. Tawny Owls will certainly eat freshly dead prey, which has not been killed by them (Meinertzhagen 1959, Räber 1949). The owls in the London Zoo are fed without difficulty on freshly killed mice and day-old chicks and sometimes rats, pieces of rabbit, raw lean beef or horse flesh (J. J. Yealland in litt.).

Although it has been shown by pellet analysis, nest watching and examination of dead birds that Tawny Owls take large numbers of earthworms (Southern 1954), observations on their method of capture seem to be rare. Presumably they are often picked up when they crawl on the surface of the ground on damp nights. Hans Räber (1949) fed earthworms to captive owls and found that their attention was attracted by the movements of the worm which was picked up direct from the ground obviously together with a great deal of earth. This would probably account for the presence of some of the leaves, twigs and small stones in the pellets. Meinertzhagen (1959) records watching an owl pattering and bouncing about on a newly mown lawn by moonlight; it would give four or five patters, then bounce to another spot 4 or 5 feet away and repeat the process, but it was never seen to pick up anything, though on several occasions it would place its head on one side as though listening. Beetle remains are frequently found in the pellets and these may well be taken as they crawl about on the ground at night, but J. F. Burton (1950) found some evidence, albeit circumstantial, to suggest that owls may dig with their feet for some beetles, e.g. a species of Scarab, swallowing earth and loose roots in the process of eating the beetle thus exposed in its deep tunnel in the ground. Most of the beetles appear to be caught with the claw, but some with the beak (Räber 1949). This owl will sometimes run after small prey on the ground (Bösiger and Faucher 1962).

Tawny Owls can hunt in relatively poor light as they have large eyes which enable them to see twenty times better than man (Meinertzhagen

1959). Hearing is also important, perhaps more so. Hans Räber (1949) found that rustling or scratching noises produced by mice or beetles caused these owls to make movements of seeking. In fact it has been shown experimentally that the Tawny Owl can catch mice in almost total darkness (Meinertzhagen 1959) and other experiments suggest that the Barn Owl *Tyto alba* can locate a mouse by sound alone (Gilliard 1958). Not only is the hearing of owls extremely sensitive but W. P. Pycraft (1910) focussed attention on two points, firstly that the right ear of the Tawny Owl is larger and of a different shape from the left and secondly, that the feathers forming the periphery of the curious facial disc play no small part, probably, in the collection and transmission of sound waves to the middle ear, acting as an "ear-trumpet". In addition the edges of the flight feathers have fragile filaments that enable birds to fly in almost complete silence, thus not interfering with the reception of sound. Therefore, it seems probable that the asymmetry of the ears, the silent flight, and the disc-like face may all be adaptations to perfect the finding and catching of prey by exact location of sounds made by it.

Holland Park (Central London)

Until 1952, when it came into the possession of the L.C.C., Holland Park had been in private occupation for over 300 years. It is situated mainly on the southern slopes of Campden Hill in Kensington, the immediate vicinity being closely built-up, but there still remain several secluded gardens. Kensington Gardens and Hyde Park are within about half a mile. According to Miss Evelyn Brown (1963) the 54 acres of the park can be divided roughly into three main types of habitat: (i) a well wooded area containing Oak, Poplar, Chestnut, Elm, Sycamore and some conifers. There are sufficient trees old enough to provide suitable nesting conditions for owls. The shrubs are mainly saplings of trees and hollies with some bramble while the herbs are chiefly grass, ivy and Cow Parsley *Anthriscus sylvestris* with some Bluebells *Endymion non-scriptus*. There is a small natural pond and an open ditch; (ii) the cultivated zone which includes the environs of the house with lawn, moat and gardens with a goldfish pond and a playing field. The principal breeding species here are House Sparrow and Feral Pigeon. Up to the summer of 1964, Feral Pigeons roosted and nested in the ruins of the house and other buildings nearby. We found that the Tawny Owl was feeding quite extensively on these pigeons and so it seems likely that they were snatched from the buildings at night. Recent repairs have much reduced the number of roosting and nesting sites so that there are now very few pigeons roosting there; (iii) a partly cultivated area with longer grass and Birch, Hawthorn, evergreens such as Rhododendron and Holly, and more exotic plants such as Bamboo and Magnolia.

The Tawny Owl is resident in the Park, two pairs having bred on a number of occasions, and may well do so regularly (Brown 1963, 1964). During the winter the owls can often be seen roosting high in certain trees. Several hundred owl pellets have been methodically collected by Miss Evelyn Brown who has searched all the known pellet-dropping sites every one or two weeks, during the period 1957 to 1964, with some assistance from

TABLE 1

HOLLAND PARK IN CENTRAL LONDON

Showing the number of each species of prey taken by the Tawny Owl (prey items) and the number and percentage of prey units. The results are expressed for each quarter of the year and also for the whole year.

Species of prey	C.F.		JAN.—MAR.		APRIL—JUNE		JULY—SEPT.		OCT.—DEC.		TOTAL	
	Prey items	% Prey units	Prey items	% Prey units	Prey items	% Prey units	Prey items	% Prey units	Prey items	% Prey units	Prey items	% Prey units
Wood Mouse	1	0	0	0	1	1	1	1	1	1	2	2
House Mouse	1	11	1	1	2	2	2	5	5	19	19	3
Mammals (?sp.)	1	1	1	1	0	0	0	0	0	2	2	2
Brown Rat	5	5	3	15	1	5	2	10	8	7	35	4
Feral Pigeon	10	30	4	40	4	40	3	30	25	14	140	17
Woodpigeon	15	0	1	15	2	30	0	0	0	3	45	5
Jay	8	8	0	0	1	8	1	8	7	3	24	3
Song Thrush	4	2	1	4	0	0	0	0	0	3	12	3
Blackbird	4	4	4	16	1	4	0	0	0	9	36	37
Thrush (?sp.)	4	13	12	48	8	32	3	12	30	36	144	37
Starling	4	2	8	32	1	4	1	4	4	12	48	48
Thrush or Starling	4	5	3	12	2	8	5	20	20	15	60	60
House Sparrow	1.25	41	51.25	63.75	25	86.25	37	23.75	20	180	225	27
Birds (?sp.)	1	10	8	8	3	8	4	4	3	30	30	4
Total	—	94	220.25	255.75	99	228.25	99	117.75	98	335	822	100

Keeper R. Barker. Table I shows an analysis of the pellet contents, with also the remains of a few birds found on the ground below the owl roosts. Only the vertebrate animals are included and the proportions of the different species found in the food are expressed as percentages in prey units, both of the total and also for each season (three-month period).

From Table I it is clear that the Tawny Owls in Holland Park feed very largely on birds (93% prey units). The species most commonly taken are Feral and Woodpigeons, thrushes probably chiefly Blackbirds, but also some Song Thrushes, Starlings and House Sparrows. Other birds eaten include Jay (3), Dunnock (4) and Greenfinch (1). The bones of Feral Pigeons do not seem to have been much noted in Tawny Owl pellets in this country, but in Fenno-Scandia Feral Pigeons were recorded more often than any other bird, presumably indicating that the owls collected a lot of their food in towns and villages (Bergman 1961). Feral Pigeons comprised 17% of the prey units in Holland Park and it may well be that these owls were to some extent controlling the pigeon population there. Two of the Woodpigeons taken were probably nestlings. The relatively few mammals were chiefly House Mice and Brown Rats, but two Wood Mice were found in the pellets, one in 1957, one in 1959 and none since. This may perhaps mean that this species has become much scarcer in this park since then and may even have died out. In March 1961 the bones of two Goldfish were found in pellets among others typical of the Tawny Owl at a well known pellet-dropping site near two pools containing Goldfish. One large pellet measuring 60 × 20 mm. had a very coarse surface, unlike the usual type of pellet, and contained the bones of a Goldfish and a House Sparrow. The identification of the Goldfish was made by A. C. Wheeler of the British Museum (Natural History) and he considered that at least one fish would have been about 6 inches long. In view of the fact that in May 1962 at the same pellet-dropping site the skull of a common Frog was found in a typical owl's pellet, it seems most probable that the Goldfish were eaten by the Tawny Owl. The only other likely bird to produce such a large pellet containing the fish and sparrow, would be a Heron. This is not a regular visitor to the park and it is said that most fish bones are so rapidly digested by Herons that few are found in their pellets (Bannerman 1957, Cooke 1951). It is of course well known that Tawny Owls do catch and eat fish. Williams (1964) watched adults bring no less than seven fish to the nest to feed the young, thus demonstrating that this prey was being taken readily, especially by the male. There was one small trout *Salmo trutta* and a Miller's Thumb *Cottus gobio*. The Handbook also records fish (trout, etc.) being taken not infrequently (Witherby 1941) and captive owls have been observed to catch fish in the water (Räber 1949). The Goldfish and Frog have not been included in Table I in order to keep it as simple as possible.

As far as seasonal changes in diet are concerned, birds form the major part of the vertebrate food throughout the year in Holland Park. In the latter half of the year there is some increase in the proportion of larger birds (pigeons and jays) (Fig. 1c), and although this is no doubt partly because there are more young Pigeons and Jays available then, it is also possible that the parent owls select larger birds to give to their young.

No doubt the owls also took a great deal of invertebrate food, much of which may leave little or no trace in the pellets. During this period of investigation 78 "fibre" pellets were collected, presumably containing the remains of earthworms and there were also parts of at least ten beetles.

Suburb at Morden, Surrey (about 10 miles from St. Paul's Cathedral)

About 381 pellets were collected from one or two pellet-dropping stations in or near my garden over a period of about 18 months (1955-6). The house and garden were situated in a suburb about 10 miles from the centre of London (grid ref. TQ256676) on a busy road, and backing on to a recreation ground with several fields used for cricket and football in the vicinity. There were scattered elms along the lines of the original farm hedges, an allotment and a railway cutting nearby. All around was a large L.C.C. Housing Estate built in 1930 or thereabouts.

For several winters one or two birds roosted in a Blue Cedar close to the busy road and in the summer they moved a few yards to a clump of small elms by the house when the leaves gave cover in May, returning to the Cedar when the elms became bare in November.

Table 2 gives the number of animals and the percentage of the vertebrate prey in "prey units" for the total period and split up into seasons. From this table it can readily be appreciated that the owl selects mammals where they are available and can find significant numbers of Brown Rats, Wood Mice and Field Voles and some House Mice, but a large part of its food is made up of birds chiefly House Sparrows, thrushes (probably chiefly Blackbirds) and Starlings. The House Sparrows seem to have been largely captured from outside the garden as during these years the Sparrow population in the garden was being intensively trapped and ringed and I estimated that about one third or more of these birds had been ringed. Nevertheless out of 82 individual House Sparrows found in owl pellets only three rings were recovered. These were found between June and September, two were of juveniles trapped and ringed between four and six weeks previously and the third was a male ringed as an adult nine months before.

In July 1955 an adult and three young birds regularly spent the day on one of the small elms and various partially eaten carcasses were found below. These have been included in Table 2. There were one juvenile Stock Dove, a species resident in the area at that time, a Brown Rat, two juvenile Blackbirds, a Chaffinch and a young Robin.

It must be emphasized that only the vertebrate food has been analysed in this study. These owls probably took many earthworms; of the 381 pellets examined, 179 were of the "fibre" type and were presumably composed chiefly of earthworm remains. During the last two weeks or so of April 1956 ten consecutive pellets were of the "fibre" type without any vertebrate remains. This may suggest that an owl can keep going for a while without any vertebrate food. During September 1955 the skins and horns of five Hawk moth caterpillars were found and were considered at the British Museum (Natural History) to be almost certainly those of the Lime Hawk moth. Another caterpillar of unknown species was found in

TABLE 2
SUBURB AT MORDEN, SURREY

Showing the number of each species of prey taken (prey items), and the number and percentage of prey units. The results are expressed for each quarter of the year and also for the whole year.

C.F. = Conversion factor.

Species of prey	JAN.—MARCH			APRIL—JUNE			JULY—SEPT.			OCT.—DEC.			TOTAL		
	Prey items	Prey units	% Prey units	Prey items	Prey units	% Prey units	Prey items	Prey units	% Prey units	Prey items	Prey units	% Prey units	Prey items	Prey units	% Prey units
Wood Mouse	44	44	22	7	7	9	14	14	10	2	2	6	67	67	15
House Mouse	1	8	4	0	0	0	4	4	3	0	0	0	12	12	3
Field Vole	1	22	11	8	8	10	5	5	4	5	5	15	40	40	9
Brown Rat	5	65	33	7	35	46	4	20	15	0	0	0	24	120	27
Mammals (?sp.)	1	2	1	2	2	2	1	1	1	1	1	3	6	6	1
House Sparrows	1.25	29	36.25	3	3.75	5	39	48.75	36	11	13.75	40	82	102.5	23
Thrushes or Starlings	4	5	10	5	20	26	7	28	20	3	12	36	20	80	18
Small birds (?sp.)	1	2	1	2	2	2	6	6	4	0	0	0	10	10	2
Large birds (?sp.)	10	0	0	0	0	0	1	10	7	0	0	0	1	10	2
Total	—	125	199.25	34	77.75	100	81	136.75	100	22	33.75	100	262	447.5	100

March 1956. Fourteen beetles were found including two Violet Ground Beetles. Rats were mainly taken in the first half of the year (Fig. 1B), perhaps because the ground vegetation cover was thinnest then. The highest proportion was reached in the second quarter possibly because there were more young ones about, the peak breeding intensity for the Brown Rat being between March and June (Matthews 1952). It may also be that owls tend to select larger prey when they have young to feed. Small rodents including Wood Mouse, House Mouse and Field Vole formed a greater proportion of the food in the winter months especially January to March (Fig. 1A). Birds formed a very significant part of the diet throughout the year, but much more so in the latter half, no doubt because there were more young birds about and rodents would be more difficult to find in dense ground vegetation (Fig. 1C). One Wood Mouse trapped by me in the garden proved to be *Apodemus sylvaticus*, so I have included all the Wood Mice in Table 2 as of this species.

Oakwood at Bookham Common (about 20 miles from St. Paul's Cathedral)

Tawny Owl pellets have been collected from mature pedunculate oakwood during the survey of this Common between the years 1949 and 1964. The wood is on damp clay; oak (*Quercus robur*) is dominant and there are scattered birches (*Betula sp.*) but other trees are relatively scarce. The shrub layer is thick in most parts of the wood; hawthorn is common and often in dense thickets and there is locally abundant hazel as well as occasional blackthorn, willow and holly. Bramble and bracken comprise the chief ground vegetation with some rose and honeysuckle.

Table 3 gives the analysis of the food taken. The owls here feed very largely on mammals throughout the year (90% of prey units). The chief food items are, of the small mammals, Wood Mouse, Bank Vole and Field Vole with a few Common Shrews, and of the larger mammals, Mole, Rabbit and Brown Rat. In addition there were some thrushes and Starlings and a few small birds including four House Sparrows and one Blue Tit. Of the rarer items the House Sparrows and the one House Mouse may have been caught near some houses at the edge of the common, although House Mice do leave houses to some extent and live in the "country". There was a Pigmy Shrew which is much less common in the oakwood at Bookham than the Common Shrew (Lord 1961) and this would no doubt account for its scarcity in the owl pellets. The bones of a Whiskered Bat were found on one occasion and identified by R. W. Hayman of the British Museum (Natural History). I do not know of any other record of this species being taken by the Tawny Owl, but pellet examination has shown that both Tawny and Barn Owls roosting in disused mine-borings occupied by Greater Horseshoe Bats *Rhinolophus ferrumequinum* frequently take the hibernating bats in December and January (Southern 1964). In June 1964 the skull of a Dormouse was found in a Tawny Owl pellet. This is the first record of a Dormouse for Bookham Common and it appears to be uncommon in the London area. Little is known about the predators of the Dormouse and the Tawny Owl is not mentioned as such by Southern (1964).

TABLE 3
OAKWOOD AT BOOKHAM COMMON, SURREY

Showing the number of each species of prey taken (prey items), and the number and percentage of prey units. The results are expressed for each quarter of the year and also for the whole year.

C.F. = Conversion factor.

Species of prey	JAN.—MARCH			APRIL—JUNE			JULY—SEPT.			OCT.—DEC.			TOTAL		
	Prey items	Prey units	% Prey units	Prey items	Prey units	% Prey units	Prey items	Prey units	% Prey units	Prey items	Prey units	% Prey units	Prey items	Prey units	% Prey units
Mole	0	0	0	3	15	7.0	5	25	53	3	15	21	11	55	11
Common Shrew	5	2.5	2	8	4	1.7	3	1.5	3	4	2	3	20	10	2
Pigmy Shrew	0	0	0	1	0.2	0.1	0	0	0	0	0	0	1	0.2	0.04
Whiskered Bat	0	0	0	1	0.25	0.1	0	0	0	0	0	0	1	0.25	0.05
Rabbit	2	20	13	4	40	17.0	0	0	0	0	0	0	6	60	12
Dormouse	0	0	0	1	1.25	0.5	0	0	0	0	0	0	1	1.25	0.25
Wood Mouse	46	46	29	27	27	12	4	4	9	15	15	21	92	92	18
House Mouse	1	1	1	0	0	0	0	0	0	0	0	0	1	1	0.2
Bank Vole	26	26	16	45	45	20	3	3	6	14	14	19	88	88	17
Field Vole	35	35	22	53	53	23	4	4	9	8	8	11	100	100	20
Mammals (?sp.)	3	3	2	1	1	0.4	0	0	0	2	2	3	6	6	1
Brown Rat	4	20	12	1	5	1.7	1	5	11	3	15	21	9	45	9
Thrushes or Starlings	0	0	0	8	32	14	1	4	9	0	0	0	9	36	7
Birds (finch size)	5	5	3	4	4	1.7	0	0	0	1	1	1	10	10	2
House Sparrows	1	1.25	1	3	3.75	1.7	0	0	0	0	0	0	4	5	1
Birds (Tit-size)	0	0	0	1	0.5	0.2	0	0	0	0	0	0	1	0.5	0.1
Total	128	159.75	101	161	231.45	101.1	21	46.5	100	50	72	100	360	510.2	100.64

Rabbits were not found in Owl pellets before 1958. The reason for this may well be that few pellets were examined before 1954 and in that year the number of Rabbits on the common was drastically reduced by myxomatosis. In 1957 it was noticed that Rabbits had become numerous again (Beven 1958). Similarly the bones of Moles were recovered from the pellets for the first time in 1958, and since 1958 "Mole runs" seem to have become more numerous in the oakwood (Beven 1959). All the Wood Mice which have been critically examined at Bookham Common were *Apodemus sylvaticus* (Harrison 1956, Lord 1961), so I have assumed that most of those taken by the owls were of this species.

Figure 1 indicates that large mammals (Rat, Mole and Rabbit) were taken most frequently during the period July to September, and small mammals (Wood Mouse, Field Vole and Bank Vole) were taken least often in this summer period. Southern (1954) found similar fluctuations in his much more extensive investigation in the oakwood at Wytham (Oxford). There may have been a slight increase in the number of birds taken in the summer at Bookham presumably because there were more young birds about and these were easier to catch.

Discussion

A somewhat simplified comparison of the food of the Tawny Owl in the three different habitats is made in Table 4. Also in this Table are some results obtained in Stockwell, about $3\frac{1}{2}$ miles from St. Paul's Cathedral by C. J. O. Harrison (1960). In 1959 and 1960 he obtained some pellets and partially eaten carcasses from Tawny Owls which were breeding in a group of tall trees left on a strip of turf surrounded on three sides by tall blocks of flats. The surrounding area was occupied by other blocks of flats, waste land being cleared for building, close rows of terrace houses and a few streets and squares of old houses with large gardens containing some mature trees. I have estimated his results in terms of prey units so as to compare them with mine. A study of Table 4 shows several interesting comparisons. It seems clear from this and other studies that Tawny Owls prefer mammals and will feed mainly on them if possible. Thus in the oakwood on the outskirts of London 90% of the prey units were mammals and only 10% birds, while at least seven species of mammal were commonly taken. On the other hand mammals are scarce in Central London so that as already pointed out by Miss E. Brown (1963) the owls are forced to subsist almost entirely on birds (93% of prey units), only 7% being mammals. Seven species of birds were commonly taken and two species of mammal. More large birds (chiefly pigeons) were taken in Central London than in the suburbs and surrounding country.

When considering the sites in between these two limits, it is remarkable to observe how the owls take more mammals as they become available. For instance more rats were taken in Stockwell than in Holland Park and at Morden over half the food taken was mammalian (55% of prey units), including four species of mammals. Wood Mice and Field Voles are present within ten miles of the centre of London. Certainly until 1959 Wood Mice were being captured by owls in Holland Park, and Field Voles are known

within 6½ miles of St. Paul's Cathedral (Teagle 1964). Nevertheless, small mammals become increasingly scarce near the city centre.

The ability of the Tawny Owl to change its feeding habits in very different situations, has without doubt, enabled the species to become a common bird in the built-up areas in central London. In 1900 the Tawny Owl was much less common than the Barn Owl (Homes *et al.*, 1957). It became steadily more numerous, however, and by 1930 had greatly increased. Since then it has remained numerous and widespread in the London area. There seem to be sufficient mature trees with holes to provide nesting sites and the birds have developed a remarkable tolerance for man. According to Bannerman (1955) this owl is attracted to town centres by the rats and mice which abound in most built-up places and no doubt this is true, but it is important to realize that, as we have seen, it can subsist almost entirely on birds and invertebrates. Bannerman mentions that during the last Great War it was to be seen in the twilight hours in the City of London, searching the bomb-sites for the wandering rats which abounded among the ruins while Guichard (1957) suggests that this species also became more numerous in Paris in 1940-44, perhaps because of the black-out conditions and less disturbance at night. In this connection it is of interest that Colin Harrison (in litt.) has several times seen Tawny Owls begin hunting along the streets of London within minutes of the extinction of the lamps at midnight in the austere post-war years. Guichard (1957) also gives the analysis of 15 Tawny Owl pellets found under pine trees in the centre of Paris. About 75% of the contents were birds, chiefly Greenfinches and House Sparrows. Greenfinches comprised about 50% of the total prey

TABLE 4

<i>Species of prey</i>	<i>Holland Park Central London</i>	<i>Stockwell Suburbs Flats and gardens (3½ miles) (Harrison, 1960)</i>	<i>Morden Suburbs Houses with gardens and playing fields (10 miles)</i>	<i>Bookham Common Oakwood (20 miles)</i>
Shrews - -	0	0	0	2
Mole - -	0	0	0	11
Rabbit - -	0	0	0	12
Bank Vole - -	0	0	0	17
Field Vole - -	0	0	9	20
Wood Mouse - }	3	0	19	19
House Mouse - }		1		
Brown Rat - -	4	17	27	9
House Sparrow -	27	42	23	1
Birds (finch size) -	4	0	2	2
Thrush or Starling	37	24	18	7
Pigeons, Jays -	25	16	2	0
TOTAL -	100	100	100	100
<i>Summary</i>				
Mammals - -	7	18	55	90
Birds - -	93	82	45	10

Simplified table showing a comparison of the percentages of prey units in the food of the Tawny Owl in four very different types of habitat. The localities are named and the distances from St. Paul's Cathedral are shown in brackets.

but this species is common in the public parks in Paris whereas it is not very numerous in Holland Park in London (Brown 1963), so it is not surprising that only one was found in pellets in Holland Park. In Paris there were two species of mammal in the 15 pellets, the Brown Rat and Wood Mouse. Guichard was also impressed by the adaptability of the owl in taking the food most easily available.

Summary

1. The pellets of some Tawny Owls and their contents are described.
2. Methods of hunting of the owl are summarized.
3. Collections of the pellets of the Tawny Owl have been made from Holland Park in central London, from oakwood on the outskirts and from a suburb about 10 miles out. A quantitative comparison has been made of the main items of food taken in these habitats, as shown by pellet examination.
4. From the results it is deduced that Tawny Owls in Holland Park feed mainly on birds (93%) chiefly Feral and Woodpigeons, thrushes (especially Blackbirds), Starlings and House Sparrows. House Mice and Brown Rats were the chief mammals taken.
5. In a suburb at Morden, Surrey, the owls fed largely on Brown Rats, Wood Mice and Field Voles, and also House Sparrows, thrushes (especially Blackbirds) and Starlings.
6. In an oakwood on the outskirts of London, at Bookham, owls take mainly mammals (90%), chiefly Wood Mouse, Bank Vole, Field Vole, Mole, Rabbit and Brown Rat; and a few shrews. The birds taken were chiefly thrushes and Starlings.
7. It is apparent that Tawny Owls take mammals if these are available, but when they are not, can readily turn to birds. They are thus able to live in the centre of London where mammals are scarce.

Scientific Names of the species mentioned as prey of the Tawny Owl

Mammals

Mole	<i>Talpa europaea</i>
Common Shrew	<i>Sorex araneus</i>
Pigmy Shrew	„ <i>minutus</i>
Whiskered Bat	<i>Myotis mystacinus</i>
Rabbit	<i>Oryctolagus cuniculus</i>
Dormouse	<i>Muscardinus avellanarius</i>
Wood Mouse	<i>Apodemus sylvaticus</i>
House Mouse	<i>Mus musculus</i>
Brown Rat	<i>Rattus norvegicus</i>
Bank Vole	<i>Clethrionomys glareolus</i>
Field Vole	<i>Microtus agrestis</i>

Birds

Stock Dove	<i>Columba oenas</i>
Feral Pigeon	„ <i>livia</i>
Woodpigeon	„ <i>palumbus</i>
Jay	<i>Garrulus glandarius</i>
Blue Tit	<i>Parus coeruleus</i>
Song Thrush	<i>Turdus ericetorum</i>
Blackbird	<i>Turdus merula</i>

Robin	<i>Erithacus rubecula</i>
Dunnoek	<i>Prunella modularis</i>
Starling	<i>Sturnus vulgaris</i>
Greenfinch	<i>Chloris chloris</i>
Chaffinch	<i>Fringilla coelebs</i>
House Sparrow	<i>Passer domesticus</i>
Others	
Common Frog	<i>Rana temporaria</i>
Goldfish	<i>Carassius auratus</i>
Violet Ground Beetle	<i>Carabus</i> sp.
Lime Hawk Moth	<i>Mimas tiliae</i>
Earthworms	<i>Oligochaeta</i>

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Instructions for Contributors of Papers

Papers concerning the ornithology of the London Area should be submitted to Miss E. P. Brown, 58 Ladbroke Grove, London, W.11, not later than the end of January if they are to be considered for publication in the same year, but it would be of assistance if details could be given in advance. They should be typed if possible with double spacing and a wide margin, on one side only of quarto paper.

Scientific names should be underlined, but not headings or sub-headings. References should be listed at the end, in alphabetical order of author's names, in the following standard form:—

LACK, D. (1953). *Life of the Robin*. London.

MEADOWS, B. S. (1961). The Gull Roosts of the Lea Valley Reservoirs. *London Bird Report*, 25 for 1960, 56-60.

The corresponding references in the text would be (Lack, 1953) and (Meadows, 1961).

Line drawings should be submitted separately, in Indian ink on thick white paper or card, preferably 2 × or 3 × the size finally intended. Any lettering must be large enough to be clear when reduced, and all lines must be solid black, not pale or imperfect. Legends should be typed separately as they will be set up by the printer.

Galley proofs will be sent to authors for scrutiny, but only essential corrections can be made at that stage.

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The Birds of Clapham and Wandsworth Commons

By JOHN GOODERS

Introduction

In spite of the attention that generations of ornithologists have lavished on the birds of Inner London, studies of suburban birds are remarkably few. This paper compares the birds at Clapham and Wandsworth Commons, areas which, together with the Commons of Tooting and Streatham, form a string of open spaces often referred to in *The Birds of the London Area* (1964) as the inner breeding limits of a number of species.

From 1961 to 1963 the author visited Clapham Common once or twice each week and often daily during August and September. During 1964 observations on a similar scale have been continued by M. Biggs who has kindly made his records available to me. At Wandsworth Common, an intensive, almost daily, watch was kept during 1964. Thus, the results presented here are an amalgam of four years' regular observation at Clapham and one year's detailed study at Wandsworth.

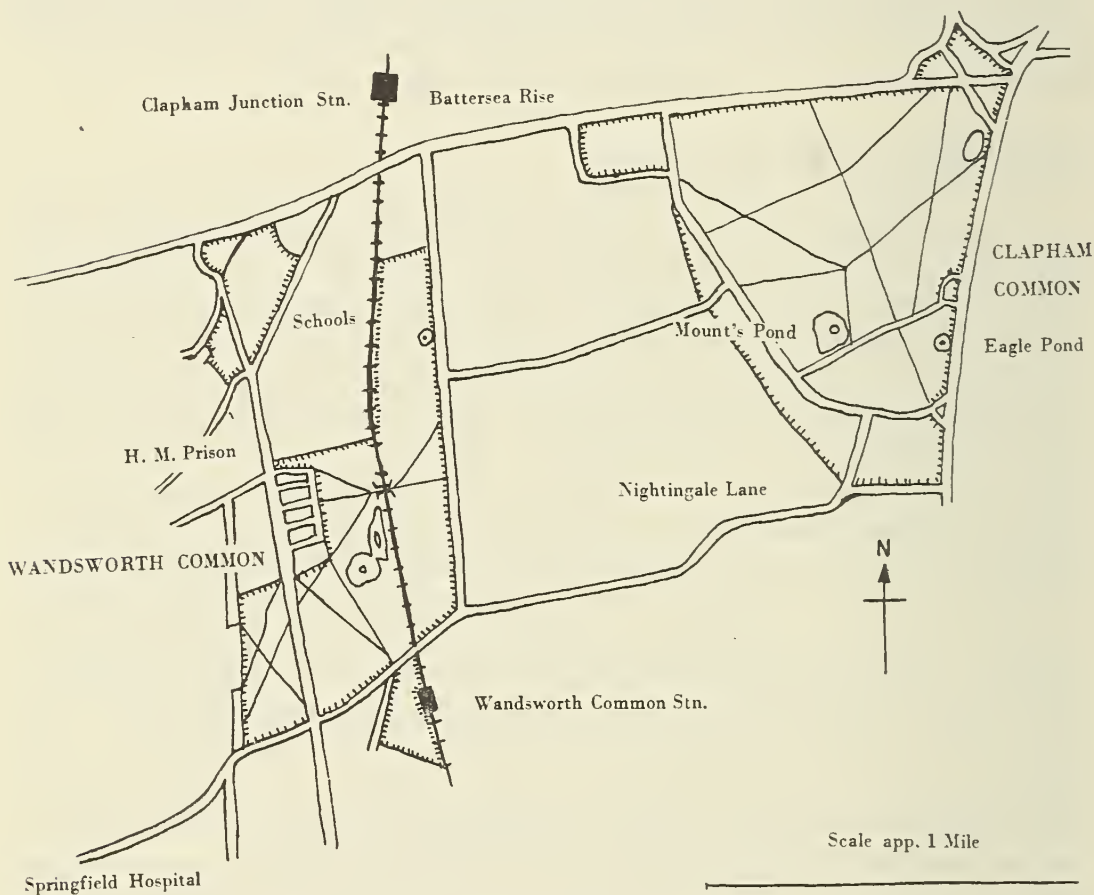
Description of the Study Area

(i) Clapham Common, lying $3\frac{1}{4}$ miles from Charing Cross, covers approximately 220 acres. It is a flat and unbroken area varying in height from approximately 70 feet to 100 feet above sea level. The surrounding suburban areas slope down steeply to Battersea, Clapham Junction and Balham. Though Hudson (1898) mentions its broken and bushy character at the end of the last century, Clapham Common has changed little during the past thirty years. It is largely grass covered and well rolled, providing numerous football and cricket pitches. Trees are in scattered clumps or thin avenues, the whole area being virtually devoid of undergrowth. A keeper's enclosure and dump, surrounded by Privet *Ligustrum sp.* and Elder *Sambucus sp.* is the only place in which even the Dunnock can breed. Though formerly surrounded by gracious houses with large gardens, Clapham has suffered considerable inroads of bricks and asphalt during this century. There were few open spaces left by 1925 and their subsequent destruction can have done little to harm those species that remained. The intensive cutting and rolling of the grass areas certainly destroyed the Skylark's habitat though it lingered to about 1926.

(ii) Wandsworth Common, some $4\frac{1}{2}$ miles from Charing Cross, lies further from the centre covering a smaller area of 183 acres, which varies in height from 70 to 125 feet. The few patches of gorse *Ulex sp.* that sheltered the Yellowhammer in Hudson's (*op. cit.*) day have disappeared, though the Common retains a quieter aspect than Clapham Common in spite of its bisection by a busy line of British Rail out of Clapham Junction and its division into seven distinct sections by roads. Three of these sections (see map) are not included in this study and thus the acreage considered is

reduced to *c.* 160. Many older houses with large gardens abut on to the Common, and the extensive grounds of Springfield Hospital, Emmanuel and Spencer Park Schools, Streatham, Wandsworth and Battersea Cemeteries, and an area of nurseries outside Wandsworth Prison do or nearly do. One major change in the surrounds of the Common since 1930 must be mentioned. An area of allotments and rough grassland between Burntwood Lane and Magdalen Road covering several hundred acres was built over in 1936. This area formerly abounded with larks and finches and was obviously a source of these species for the Common proper. Additionally it supplied foraging for the colony of Rooks that remained in Burntwood Lane until 1919.

The vegetation of the two areas is basically similar though Wandsworth Common possesses an area of rough-boggy ground with uncut grass and a few bushes in the extreme south-western corner. The trees are planted in avenues dominated by London Planes *Platanus sp.* and Hawthorns *Crataegus sp.* though Wandsworth has rather more of them. A major difference, however, is the comparative lack of birches at Clapham that provide several



Sketch map of Clapham and Wandsworth Commons showing their general location and juxtaposition. The continuous lines across the areas show the main footpaths. Attention is particularly drawn to the fragmentary nature of both areas and especially of Wandsworth Common. The three small sections of Wandsworth Common in the top left of the map, north of the Prison, are omitted from this study.

compact areas of almost true woodland at Wandsworth and the habitat most favoured by nocturnal migrant warblers.

Each Common has two ponds, excluding a concrete banked pool at Clapham that is used by model yacht and speedboat enthusiasts. All have islands affording varying amounts of cover. They provide breeding sites for several aquatic species, and the island on the larger pond at Wandsworth provides the safest nesting site on either Common for small passerines with the extensive cover of Hawthorn, Birch *Betula sp.*, Elder, *Rhododendron Rhododendron sp.*, Brambles *Rubus sp.*, and Bracken *Pteridium sp.*

A final, but important, difference between the Commons lies in their usage by the public. Though much frequented, especially during the summer, Wandsworth is quiet in comparison with the total human exploitation that afflicts Clapham Common at summer week-ends.

Summer Population

The number of species breeding or present during the summer combined for both Commons gives a total of 22 species which is similar to the 26 (excluding the Feral Pigeon) that Simms (1962) found in another suburban area of London at Dollis Hill. The main differences are the absences of the Kestrel, Stock Dove, Skylark, Wren, Robin, Blackcap, Willow Warbler, Goldfinch and Tree Sparrow from the present study area; and the absence from Dollis Hill of the Tufted Duck, Mute Swan, Coot and Moorhen. The greater variety of habitats at Dollis Hill, especially the areas of allotments which account for Wrens and Robins, and the special area of woodland and orchard with Wren, Goldfinch, Tree Sparrow and the occasional Blackcap and Willow Warbler, are unparalleled at Clapham and Wandsworth. The area of Gladstone Park would appear to present a more valid comparison and here all the species breeding at Dollis Hill also breed in the study area, excepting only the Wren, Robin and Greenfinch.

The comparative scarcity of the Jay at Dollis Hill is notable, as many as 12 being seen in one tree at Wandsworth Common in spring 1965.

(i) A COMPARISON OF THE TWO COMMONS

A list of the species that summer in the areas is set out in Table 1. The figures for Clapham are the result of a partial census in 1962, except where stated to the contrary. This year was, in fact, a good year with Dunnock and Spotted Flycatcher both breeding for the last time during the study period.

The totals, which exclude Starling and House Sparrow, show clearly that a considerably larger breeding population is able to exist on Wandsworth Common. The vital comparison is 76 pairs per 220 acres with 127 pairs per 160 acres and thus the greater degree of attraction or safety is apparent.

The species that breed only on Clapham Common are the aquatic Mute Swan and Tufted Duck and the irregular Spotted Flycatcher. In recent years immature Tufted Duck have shown a tendency to summer on Mount's Pond, Clapham, culminating in successful breeding in 1963 when a duck raised eight young on Eagle Pond. Breeding took place again in 1964. The general scarcity of this species at Wandsworth Common is

shown in the maximum count of six compared with the regular 20+ at Clapham in winter. The Mute Swan has bred regularly for some years. It formerly nested at Eagle Pond, alongside the busy A23, but has moved to Mount's Pond within the last six years. Success is always low and in 1962 and 1963 only a single cygnet was reared from broods of five and six. Occasionally two pairs of adults have been present on different ponds in autumn. The only record of this species at Wandsworth is of a singleton on February 6th, 1964. The Spotted Flycatcher bred at Clapham only in 1962, and it is significant that the species enjoyed a remarkably successful season in Inner London that year.

TABLE 1
BREEDING POPULATION IN PAIRS

	Clapham			Wandsworth
	1961	1962	1963	1964
Mallard - - - -	B	c. 10	B	10
Tufted Duck - - -	P	P	1	—
Mute Swan - - - -	1	1	1	—
Moorhen - - - -	B	4	B	3
Tawny Owl - - - -	—	—	1	2
Coot - - - -	B	3	B	4
Woodpigeon - - -	B	c. 30	B	c. 25
Carrion Crow - - -	B?	2	B	3
Jay - - - -	P	1	P	3
Great Tit - - - -	—	—	—	3
Blue Tit - - - -	B	2	B	5
Swift - - - -	—	—	—	c. 20
Mistle Thrush - - -	B	3	B	7
Song Thrush - - -	B	3	B	7
Blackbird - - - -	B	15	B	25
Spotted Flycatcher - - -	—	1	—	—
Dunnock - - - -	P	1	P	8
Pied Wagtail - - -	—	—	—	P
Starling - - - -	B	B	B	B
Chaffinch - - - -	—	—	—	3
Greenfinch - - - -	—	—	—	P
House Sparrow - - -	B	B	B	B
TOTAL SPECIES - - -	15	16	16	19
TOTAL PAIRS (Excluding Starling and House Sparrow) - - -		76		127

TOTAL SPECIES FOR BOTH COMMONS = 22

B = Breeding P = Present during summer

Species breeding at Wandsworth but not at Clapham are Swift, Great Tit and Chaffinch, and both Greenfinch and Pied Wagtail are present during the summer. The Swift breeds in houses overlooking Wandsworth Common, along Bolingbroke Grove, and in adjacent side streets, and though it bred at Clapham in 1952, Wandsworth now probably represents its inner breeding limit for this part of the London area. Three pairs each of Great Tit and Chaffinch bred in 1964. Both species also regularly breed in the cemeteries and open spaces adjacent to Wandsworth Common, and

there is certainly some movement between the Common and the grounds of Springfield Hospital. Greenfinches are present throughout the year though breeding evidence is restricted to a family party of recently fledged young in an adjacent cemetery. They are most frequently met with in spring when flocks of up to 25 are regular on both Commons. Clapham provides the larger figures but flocks at Wandsworth have a tendency to be smaller and more scattered. Those at Clapham have been observed only in a small Hawthorn wood on West Side. A Pied Wagtail was seen carrying food into a nearby back garden and a family party was present in July 1964 at Wandsworth. There is no doubt that this pair's existence was closely associated with the area of feeding provided by the Common, especially of the open grass pitches. A pair bred on wartime allotments at Clapham Common in 1919, Johnson (1930).

Mallard breed in approximately the same numbers at both localities. Usually, however, more birds are present at Clapham though breeding success is exceedingly low, probably due to the almost total bareness of the only island in Mount's Pond. Cases of haphazard egg laying have occurred at Mount's and at the smaller pond at Wandsworth. In these circumstances eggs are laid here and there without nests being built, presumably because of the lack of sites and nesting materials. The example at Clapham in April 1962 certainly concerned more than one bird. At Wandsworth, where cover is better, fledged young are more plentiful, and there is an example of a duck rearing a full brood of thirteen. Maximum numbers are usually reached during the eclipse period when over seventy adults and young have been recorded in August at Mount's Pond.

Moorhen and Coot breed regularly on both Commons on two ponds at Clapham and on one at Wandsworth. The number of pairs, however, is about the same. Maximum numbers recorded during the winter months are ten Moorhen at Wandsworth December 1964, and no less than twenty Coot at Clapham during the same month.

Woodpigeons commonly nest in both areas and probably in greater numbers at Clapham only because of the longer avenues of London Planes, which are preferred as nesting sites: many more nests at Wandsworth are found in Hawthorns.

Tawny Owls are regular at Wandsworth where two pairs have been established since observations began. Breeding of one pair was proved in 1964. This species is more erratic at Clapham, birds being heard occasionally though not regularly, except in 1963, when it probably bred.

Carrion Crows breed on both Commons, their numbers remaining unchanged throughout the study period. Each pair usually raises two or three young. The birds of the year at Clapham are regularly of the white wing-barred variety that has been noted elsewhere. Jays probably breed regularly, but there is never more than a single pair at Clapham. Breeding evidence is confined to an observation of two young, barely able to fly, in 1962. Wandsworth, however, had three pairs in 1964 all of which probably bred.

Great Tits are surprisingly absent from Clapham during the summer and, though present at other seasons, are scarce. This contrasts with

Wandsworth where three pairs bred in 1964, and, in later summer, up to fifteen were recorded. Blue Tits breed at both localities but probably no more than two pairs at Clapham and five at Wandsworth. Nests found have been in London Planes and Willows. A marked increase in this species took place at both localities on 6/10/63 when there were ones and twos here and there throughout the area. Birds were present in gardens and in trees along the roadsides. There were probably over a hundred on each Common that day, and at nearby Earlsfield high numbers were also noted on an area of rubbish dump and disused allotments that had been regularly watched. This movement was doubtless associated with the periodic irruptions of this species (Cramp, 1960).

Perhaps the biggest single difference in the breeding population of the two Commons is the greater number of thrushes and Dunnocks present at Wandsworth. The relevant figures for the four species concerned are 21 at Clapham and 47 at Wandsworth, a true indication of the availability of nest sites at the latter. Over twice as many Song Thrushes and Mistle Thrushes nested at Wandsworth as Clapham, though a Mistle Thrush at Wandsworth could find nothing better than a fork in a Hawthorn only six feet from the ground: most nests of this species have been in the major forks of London Planes. In spite of the lower breeding population, the largest post-nuptial flock was at Clapham where 21 birds stayed together through August 1962.

One pair of Dunnocks bred regularly in the Privet and Elder scrub surrounding a keeper's enclosure at Clapham Common. This was "improved" in December 1963 and the species did not breed in 1964. The situation presents a strong contrast to Wandsworth where eight pairs bred that year. Three of these pairs found sites on the main island in the pond and another pair bred on the railway embankment.

Starling and House Sparrow breed on the buildings on both Commons; the Starling also frequently builds in trees, and tree nests of the House Sparrow have been recorded annually at Clapham. The population of both species is certainly higher at Clapham where the duck feeding habit is much more strongly developed among the more numerous human visitors. Starling flight lines pass over both Commons, and in January and February 1964, thousands used some tall trees in the grounds of Emmanuel School, adjacent to Wandsworth Common, as a staging post on their way to the Central London roosts.

(ii) A COMPARISON WITH EARLIER RECORDS

A comparison of Breeding Season records for Wandsworth Common, made in 1964, with records for 1925-31, made by J. H. Ward, is set out in Table 2. During the earlier period, a total of twenty-eight species bred or were present during the breeding season, the comparative figure for 1964 being nineteen species. These totals have been broken down into three broad categories, Regular, Irregular, and Present (during the summer). Changes can be treated roughly as gains or losses though no true estimate of the numbers involved can be given.

TABLE 2
SUMMER POPULATION AT WANDSWORTH COMMON
1925-1931

	1925-1931	1964
Regular breeder	Mallard	Mallard
	Tufted Duck	
	Moorhen	Moorhen
		Coot
		Woodpigeon
	Tawny Owl	Tawny Owl
		Swift
	Skylark	
	House Martin	
	Carrion Crow	Carrion Crow
		Jay
	Great Tit	Great Tit
	Blue Tit	Blue Tit
	Mistle Thrush	Mistle Thrush
	Song Thrush	Song Thrush
	Blackbird	Blackbird
	Robin	
Dunnock	Dunnock	
Starling	Starling	
Chaffinch	Chaffinch	
House Sparrow (17)	House Sparrow (17)	
Irregular breeder (early period)	Coot	
	Woodpigeon	
	Wren	
	Whitethroat	
	Willow Warbler	
	Spotted Flycatcher (6)	
Total Species Breeding Present in summer	23	17
	Swift	
	Swallow	
	Sand Martin	
	Pied Wagtail	Pied Wagtail
Total Species Present	Greenfinch (5)	Greenfinch (2)
	28	19

(a) *Species present only in the earlier period*

Tufted Duck regularly bred at Wandsworth Common but as we have seen are far commoner at Clapham today; a maximum flock of 31 on 3/3/31 compares with a contemporary maximum of six. House Martins bred regularly and there are records of small colonies at Lyford Road, Herondale Road, and Nightingale Lane: though this species nests as near as Tooting Bec Common, there was only one summer record in 1964. The Skylark, though breeding on the Common was closely associated with the rough ground and allotments to the West of the Common proper and doubtless disappeared when that area was built over in 1936. It formerly abounded in winter and Johnson (*op. cit.*) even says that it bred regularly in the enclosure round the Church on Clapham Common. Today it is seen only in diurnal movements in the spring and autumn. The Wren and the Robin formerly bred, and, indeed, were almost commonplace, but in 1964 both occurred only as double passage migrants though they were both continuously present in October and November. The Robin, however,

nests in the nearby cemeteries and probably in the grounds of the adjacent Springfield Hospital.

The Spotted Flycatcher was evidently as irregular in the 1920s as it is today, and there is no evidence of a change in status. The disappearance of the Willow Warbler and the Whitethroat is not surprising in view of the lack of suitable cover; indeed it is surprising that they bred as recently as the late 1920s. In fact there is no formal proof of breeding during the earlier period but birds were recorded singing "day after day" in June every year. The two are found now only as regular migrants never staying more than a day or two.

Swallows and Sand Martins were seen regularly during the summer months, the latter breeding as near as the railway embankment at Clapham Junction in 1924-25 and at Earlsfield in 1944. The nesting whereabouts of the visiting Swallows, however, remains unknown and there is no evidence of breeding in the immediate neighbourhood since 1916.

(b) *Species present only in 1964*

Only the Jay comes into this category. Johnson thought it less plentiful than the Magpie in 1930 but there is no support for this statement.

(c) *Changes in status of breeding species*

There is little doubt that the number of Coots and Woodpigeons has increased during the past thirty years. Coots now breed plentifully whereas in the past they were irregular breeders. Woodpigeons in particular were irregular in the early period, a flock of 16 being quite noteworthy. Today, this species breeds abundantly, and post-nuptial flocks, mainly composed of adults, of over 200 are not unknown. At Clapham Common birds nest over busy thoroughfares and in 1962 a pair bred 7 feet from the ground within three paces of a busy Taxi Rank and Bus Stop.

Swifts, though frequently present in summer in the 1920s, are so far ranging that they need not have bred locally. A considerable number (*c.* 20 pairs) now do so along Bolingbroke Grove, and in mid-summer over a hundred are frequently present at dusk.

Winter Population

A comparison of the two Commons and with older records where available.

In Table 3 the method of classification first used by Cramp (1949) is used. This shows clearly the status of those species present during winter. These normally number twenty-five at Clapham and twenty-four at Wandsworth. The only significant difference between the two is the omission of the Mute Swan from the Wandsworth list. Thus the two localities are more nearly comparable in winter than in summer. Numbers are not available for all species but where they are there is little appreciable difference. The diving duck are more numerous at Clapham with up to seven Pochard frequently present, but never more than four irregularly at Wandsworth. Tufted Duck numbers have already been mentioned.

The population of gulls differs markedly, largely because of the comparatively small size of the open grass pitches at Wandsworth. Thus the maximum numbers are *c.* 1,000 Black-headed Gulls at Clapham but only *c.* 350 at Wandsworth, most of the latter on an enclosed playing field area.

Common Gulls, frequently *c.* 400 in February at Clapham, have not reached 100 at Wandsworth. The other species are rare enough, though regular, at both localities in winter. Herring Gulls are present daily from late October to early March, but the maximum is only seven in November 1964 at Wandsworth. Greater Black-backed are rare and are usually only seen flying over. Autumn maximum numbers of Lesser Black-backed are roughly the same at both localities with *c.* 200 present. Perhaps the greater degree of public disturbance at Clapham at this time offsets Wandsworth's smaller, yet undisturbed, area of grass. Comparison of these figures with older records indicates a considerable change. There is no record approaching contemporary figures of Black-headed Gulls at either Common, *c.* 200 being quite remarkable in 1925-31. The Common Gull was a seldom recognized rarity, and the other species totally unknown. This confirms other evidence of an increase of the wintering of these species in the London Area.

TABLE 3
WINTER POPULATION: SPECIES PRESENT
Clapham Common 1961-64 *Wandsworth Common* 1964

A. Present all year	Mallard Tufted Duck Mute Swan Moorhen Coot Woodpigeon Tawny Owl Carrion Crow Jay Blue Tit Blackbird Starling House Sparrow (13)	Mallard Moorhen Coot Woodpigeon Tawny Owl Carrion Crow Jay Great Tit Blue Tit Blackbird Dunnock Pied Wagtail Starling House Sparrow (14)
B. Present all year but less common in winter	Mistle Thrush Song Thrush (2)	Mistle Thrush Song Thrush Chaffinch (3)
C. Resident or frequent in winter	Pochard Lesser Black-backed Gull Herring Gull Common Gull Black-headed Gull Robin Pied Wagtail Dunnock Great Tit Chaffinch (10)	Tufted Duck Pochard Lesser Black-backed Gull Herring Gull Common Gull Black-headed Gull Robin (7)
TOTAL SPECIES PRESENT IN WINTER	25	24

Records of Fieldfares and Redwings in winter have been almost non-existent in recent years, being confined to the occasional hard-weather movement. Even the bitter winter of 1962-63 produced no substantial records. In 1925-31 these species were regular and occasionally occurred in large flocks. For instance, the 200 Redwings that spent December 1924 at Clapham surpass all other records of this species. The Redwing is now most frequently met on passage, especially in spring, when up to 12 have been seen together.

Migrant Population

(i) NOCTURNAL MIGRANTS

A detailed summary of nocturnal migration through Wandsworth Common will appear elsewhere (Gooders, in prep.). Wallace (1961a), (1961b), (and in *London Nat. Hist. Soc.* 1964), has shown clearly the value of keeping records of nocturnal migrants at inland localities, and the Inland Observation Point Scheme of the British Trust for Ornithology clearly recognizes the fact. In view of the growth of this scheme, it is salutary to realize that it was only in 1959 that Wallace showed that nocturnal migrants in Regent's Park conformed to an annual pattern. Here I shall only compare the migrants seen on the two Commons and present a broad summary of the main movements.

In the two autumns of 1962 and 1963 a total of 36 days' observations at Clapham Common in August and September (the peak months of nocturnal passage) was made. Of these, only nine days produced one or more nocturnal migrants. At Wandsworth Common, during the same months in 1964, a total of 47 days' observation was made and only six days (four of these right at the end of September) failed to produce one or more nocturnal migrants. Four species were observed at Clapham (Willow Warbler, Chiffchaff, and Pied and Spotted Flycatcher) compared with eight species at Wandsworth, the additional species being Whitethroat, Blackcap, Garden and Wood Warblers.

Coverage in spring was never sufficient to determine whether migrants at Clapham were regular or not, but a full season's observations at Wandsworth show migrants to be of almost daily occurrence throughout April. A total of twelve species of migratory warblers, chats, and flycatchers passed through in March, April and May, including such unusual species as Lesser Whitethroat, Sedge Warbler and Wood Warbler.

At Clapham almost all migrants were to be found in a small area dominated by Hawthorns at the western extremity of the Common. Though not confined clearly to one area, nocturnal migrants at Wandsworth were to be found mainly in two small areas of birch, and in the tangle of undergrowth on the island at the larger pond. On 19/4/64 the author stood watching the Park Keepers land to lay poisoned bait for rats. As they worked their way up the island, acting as unintentional beaters, they drove before them and off the end of the island a Whitethroat, a Blackcap, a Pied Flycatcher and no less than 12 Willow Warblers. This same day at Clapham M. Biggs observed a Pied Flycatcher, two Whinchats,

a Sedge Warbler and a Redstart, the three latter being new birds for the Common.

As the figures available are primarily those for Wandsworth, a summary of spring and autumn movements for this locality only is given in Table 4. These are grouped in weeks and show clearly the main periods of passage and the species involved. Both spring and autumn are dominated by Willow Warblers, though, as elsewhere, the Chiffchaff becomes the dominant species from the second week of September. Table 4A clearly shows the complete standstill in migration during the first week of April, a phenomenon observed by Bird Observatories and inland localities alike in the spring of 1964. The Table also reveals the importance of the second half of April and the first half of May, for seven out of twelve migrant species did not make their appearance until this period.

Though incomplete at a rather critical period, Table 4B shows the early passage of Willow Warblers and the build up to a peak passage in mid-August. There is little doubt that migrants would have been recorded in high numbers in the second half of August had observations been possible.

TABLE 4
NOCTURNAL MIGRANTS WANDSWORTH COMMON 1964
TOTAL "BIRD-DAYS" GROUPED IN WEEKS

A.	March 24-31	April 1-7	April 8-14	April 15-21	April 22-28	April 29- May 5	May 6-12
Redstart	—	—	—	—	2	—	1
Sedge Warbler	—	—	—	—	1	—	1
Blackcap	1	—	—	1	6	—	2
Garden Warbler	—	—	—	—	1	1	2
Whitethroat	—	—	—	1	5	2	2
Willow Warbler	—	—	1	35	18	24	8
Chiffchaff	3	—	1	—	—	—	5
Wood Warbler	—	—	—	—	1	—	1
Pied Flycatcher	—	—	—	4	—	—	—

also Lesser Whitethroat 2, Spotted Flycatcher 5, Whinchat 1, all May 6-12.

B.	July 27- Aug. 2	August 3-9	Sept. 1-7	Sept. 8-14	Sept. 15-21
Blackcap	—	—	1	—	2
Garden Warbler	—	1	—	—	—
Whitethroat	1	—	—	—	—
Willow Warbler	25	63	18	9	10
Chiffchaff	—	—	—	13	24
Wood Warbler	—	—	1	—	—
Spotted Flycatcher	—	—	3	—	3
Pied Flycatcher	—	—	3	1	1

It is intriguing that a better collection of nocturnal migrants was recorded in spring than in autumn 1964, and it seems likely that this was probably due to the lack of overnight rain and fog during the Indian summer of August and September.

(ii) DIURNAL MIGRANTS

The largely broad-front passage of diurnal migrants across the London Area has been studied and summarized especially by Power (1910),

Parrinder in London Nat. Hist. Soc. (1964), Gibbs and Wallace (1961), and Wallace in London Nat. Hist. Soc. (1964). Visible migration watches have been kept at both Clapham and Wandsworth, though the most intensive watch was kept at Clapham during October 1962. The results in no way vary from those obtained elsewhere in the London Area and are summarized under species below:—

- Lapwing: only a singleton in October 1962; one 8/3/63, both at Clapham. At Wandsworth 1964, two on 9/4, one on 25/5, nine on 28/5, one on 31/5, two on 5/8, one on 12/8, 41 on 26/12.
- Woodpigeon: four on 21/10 and one on 23/10/62 at Clapham were flying very high. 50 flying west 23/11 and 34 flying north-east 25/11/64 at Wandsworth coincided with very heavy movements of this species elsewhere in the London Area.
- Swift: seen to migrate only in August, especially 13/8/63 at Clapham when 30 flew strongly south; and 3/8, 4/8, and 10/8/64 at Wandsworth.
- Skylark: seen regularly on spring and autumn passage in small numbers except 19/10/64 at Wandsworth when 45 flew west in a 30-minute watch.
- Swallow: regular on spring and autumn passage at both localities. Maximum *c.* 30 14/9/62 at Clapham. An interesting phenomenon, that parallels that observed at Regent's Park in 1959 (Wallace, 1961), was the grouping of all migrant Swallows in autumn along an aerial path no more than 50 yards wide, running from the north, along the western edge of the Pond, then turning south-west along an avenue of Horse Chestnuts *Aesculus sp.* toward the open ground at Springfield Hospital.
- Sand Martin: one flew west at Clapham 8/8/62; one seen hawking over the pond at Wandsworth 8/5/64, two flying east 4/8/64, two flying west 9/8/64, four flying north-east 1/9/64, three flying south-west 10/9/64, eight flying east 13/9/64, one flying south-west 21/9/64, three flying south-west 26/9/64, all at Wandsworth. On 9/8/64 no less than 28 were seen flying excitedly at dusk, presumably looking for a possible roost in a somewhat hostile environment.
- House Martin: seen more regularly than the Sand Martin on both spring and autumn passage, though usually seen singly, occasional small parties pass through. Most frequently seen over the Ponds.
- Fieldfare: remarkably scarce, the only record apart from single birds being a flock of 25 at Clapham 18/3/62.
- Song Thrush: regular watches at Clapham showed an increase from *c.* 10 to *c.* 50 overnight on 12/13 October 1962.
- Meadow Pipit: seen very infrequently on spring passage, but quite commonly during autumn; maximum 25 in an hour on 26/9/62.
- Pied Wagtail: often seen on the grass pitches and along the Pond edges in spring and autumn. Quite frequently recorded during diurnal migration watches, especially in autumn.
- White Wagtail: this sub-species was recorded twice in spring at Wandsworth in 1964, one on 9/5, and another 11/5.
- Starling: probably the commonest diurnal migrant in autumn, reaching a

peak in late October. In 1962 1,000 passed N.W. in one hour at Clapham 23/10, and 25/10 produced 340.

Goldfinch: very infrequently observed; a single record of two at Clapham 20/10/63 and singletons, that could have been migrants, on several dates at Wandsworth.

Linnet: a frequent migrant in autumn with flocks of over 20 passing, usually west. Maximum: 106 in an hour at Clapham 14/10/62, though 53 spent March 1962 at Clapham.

Redpoll: not observed at Clapham but surprisingly frequent in spring 1964 at Wandsworth, where it found birches particularly attractive. Observed once in March, on eleven days in April and once in May; maximum: six on 17/4.

Chaffinch: the most frequently met migrant. Almost every morning between late September and early November produced Chaffinches flying westwards continually. Passage rates vary but about 80 per hour is a good average; maximum: 98 in an hour on 20/10/62 at Clapham.

Irregular Visitors

There remain records of those species that occur so irregularly as to be unclassifiable under the preceding headings. Some of these are doubtless destined to remain as isolated occurrences, for instance it is unlikely that the Black Redstart will prove more than an erratic visitor in the near future. Others, like the Turtle Dove and Woodcock, might easily turn out to be regular annual visitors with more intensive observation in future years.

Though isolated records of species other than those below are available, they are omitted, the list that follows containing only those records for the periods 1925-31 and 1961-64.

Little Grebe: a regular visitor in early spring in the 1920s. Only two contemporary records, one at Wandsworth 28/3/64 and two at Mount's Pond, Clapham, for a few days from 21/11/64.

Heron: frequently seen flying over, according to Johnson. Recent records are singles on 8/8/62, and October 1962 at Clapham and 12/4 and 4/9/64 at Wandsworth.

Teal: two records of birds at Wandsworth, two on 11/11/27 and a duck 13/9/64.

Canada Goose: one 12/4/63, and two 14/4/64 at Clapham.

Kestrel: often seen overhead, perhaps 10 records per annum at both localities. It probably breeds at the Sewage Works by the River Wandle at Durnsford Road, *c.* 1 mile from Wandsworth.

Woodcock: not recorded in the early period. Singles at Clapham on 17/3/63 and in 3/63 when one was found dead. At Wandsworth one on 7/4/64.

Curlew: three flew north-west on 6/7/63 at Clapham.

Dunlin: one at Eagle Pond, Clapham, 16/1/64.

Stock Dove: the only record is of two flying north-west on 29/9/64 at Wandsworth.

- Turtle Dove: singles at Clapham 9/8/62 and 15/5/64, and at Wandsworth 3/5, 10/5/64; all were seen flying west.
- Great Spotted Woodpecker: singles only at Clapham in autumn 1961 and 28/6/63.
- Green Woodpecker: one at Clapham 13/5/63.
- Jackdaw: a single record of two birds flying south at Clapham 7/8/62.
- Magpie: one at Clapham 1/8/63.
- Coal Tit: two on 1/4/62 at Clapham and a singleton at Wandsworth 15/12/64.
- Wheatear: two on 12/5/64 at Clapham and seen by Ward during the early period though no details available.
- Black Redstart: one at Clapham 24/4/64.
- Grey Wagtail: two flew north-west on 5/10/63 at Clapham, and one flew north on 13/10/64 at Wandsworth.
- Yellow Wagtail: one flew west on 29/9/62 at Clapham and two flew north-east on 12/9/64 at Wandsworth.

Acknowledgements

I am indebted to Mr. J. H. Ward whose generous loan of original note books for the two Commons for the period 1925-31 supplied the basis of the earlier records and the idea of this comparative study. I am grateful to Stanley Cramp for introducing me to Mr. Ward, and for reading the paper in manuscript and making valuable suggestions and criticisms. My thanks also go to M. Biggs for supplying records for Clapham Common, to D. Royle for help with botanical descriptions, and to Jack Berryman who has made every effort to turn this paper into readable English. Thanks also to Miss A. Lightfoot for typing the manuscript; and finally to the Editor of the *London Bird Report* and his Committee for suggested improvements and modifications.

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Appendix

List of Species observed at Clapham and Wandsworth Commons in the Wetmore Order. Though not comprehensive locality lists they provide the basis for future comparison and do not exclude any species observed by Ward from 1925 to 1931. Species marked with an asterisk have been added during 1965, and the lists are complete to the 1st April, 1965.

WANDSWORTH COMMON 1964

Little Grebe
 Heron
 Mallard
 Teal
 Tufted Duck
 Pochard
 Canada Goose*
 Mute Swan
 Kestrel
 Water Rail
 Moorhen
 Coot
 Lapwing
 Woodcock

 Great Black-backed Gull
 Lesser Black-backed Gull
 Herring Gull
 Common Gull
 Black-headed Gull
 Stock Dove
 Woodpigeon
 Turtle Dove
 Tawny Owl
 Swift

 Skylark
 Swallow
 House Martin
 Sand Martin
 Carrion Crow
 Jackdaw*

CLAPHAM COMMON 1961-2-3-4

Little Grebe
 Heron
 Mallard

 Tufted Duck
 Pochard
 Canada Goose
 Mute Swan
 Kestrel

 Moorhen
 Coot
 Lapwing
 Woodcock
 Curlew
 Dunlin
 Great Black-backed Gull
 Lesser Black-backed Gull
 Herring Gull
 Common Gull
 Black-headed Gull

 Woodpigeon
 Turtle Dove
 Tawny Owl
 Swift
 Green Woodpecker
 Great Spotted Woodpecker
 Skylark
 Swallow
 House Martin
 Sand Martin
 Carrion Crow
 Jackdaw

WANDSWORTH COMMON 1964

Jay
Great Tit
Blue Tit
Coal Tit
Wren
Mistle Thrush

Song Thrush
Redwing
Blackbird

Whinchat
Redstart

Robin
Sedge Warbler
Blackcap
Garden Warbler
Whitethroat
Lesser Whitethroat
Willow Warbler
Chiffchaff
Wood Warbler
Goldcrest*
Spotted Flycatcher
Pied Flycatcher
Dunnock
Meadow Pipit
Pied Wagtail
White Wagtail
Grey Wagtail
Yellow Wagtail
Starling
Greenfinch
Goldfinch
Siskin*
Linnet
Redpoll
Chaffinch
House Sparrow (67)

CLAPHAM COMMON 1961-2-3-4

Magpie
Jay
Great Tit
Blue Tit
Coal Tit
Wren
Mistle Thrush
Fieldfare
Song Thrush
Redwing
Blackbird
Wheatear
Whinchat
Redstart
Black Redstart
Robin
Sedge Warbler

Whitethroat

Willow Warbler
Chiffchaff

Spotted Flycatcher
Pied Flycatcher
Dunnock
Meadow Pipit
Pied Wagtail

Grey Wagtail
Yellow Wagtail
Starling
Greenfinch
Goldfinch

Linnet

Chaffinch
House Sparrow (64)

Woodpigeons in a London Suburb

By R. E. F. PEAL

THE Woodpigeon (*Columba palumbus*) has been known to nest on buildings in Inner London since the 1890s (Homes *et al.*, 1957) but the only record in previous *London Bird Reports* of such nesting in suburban London has been of instances in the Belsize Park district of Hampstead discussed below.

This district was largely developed about 1860, the houses being stucco-fronted and of a somewhat similar design. At the side of the semi-detached houses, a rainwater pipe commonly leads from the gutter into the vertex of a right angle in the wall and nests are built by Woodpigeons on these pipes, sheltered by the eaves and resting against the walls, as shown in the Plate, page 90. I studied an area in which there were 62 semi-detached houses with such pipes at approximately weekly intervals from April 16th to July 29th, 1962, March 8th to June 30th, 1963, and February 2nd to April 25th, 1964.

In 1962 there were 11 nests on pipes, of which seven were occupied by Woodpigeons, but one collapsed before laying began. Young were seen in three nests and there were probably two broods in each of six nests. In 1963 there were 15 nests, of which three were removed before being regularly occupied. Woodpigeons probably reared two broods in each of four nests and one nest was removed after the first brood had fledged. Feral Pigeons (*Columba livia*) occupied one nest and in another Woodpigeons apparently bred and were followed by a pair of Feral Pigeons. In 1964 by the end of April there were six nests, two of which were occupied by Woodpigeons, and Feral Pigeons were apparently breeding in a nest in which Woodpigeons had reared young the previous year.

Rainwater pipes of the type described differ considerably in suitability for nesting as some are slightly steeper than others, and the nest material has to be partly supported against the walls, which vary in condition. One nest was seen to collapse in 1962 but of 11 nests which disappeared in 1963 at least five were removed because of repainting or repairs, while two others were destroyed and replaced by wire to keep birds off. These nests are in a sheltered position and, although they are about 40 feet above the ground, it seems that removal by owners or tenants is much commoner than collapse through instability. A local builder states that he has known of such nests on pipes for a number of years and Miss T. G. Gompertz informs me that, whilst studying Feral Pigeons in 1955 about a mile away, she saw Woodpigeons breeding in a comparable site.

Watch was also kept on the roadside trees, over 50 in number and mostly mature, in Belsize Avenue which was adjacent to the area studied. The maximum of five nests was seen in 1962 but trees in gardens provided possible nest sites which could not be examined. These trees were also used

by roosting Woodpigeons, the largest number being 12, in six trees, in March 1964.

Mating, on the only two occasions observed, took place in trees. Caressing (see Cramp 1958) occurred on pipes and bowing was seen on pipes and roofs but was particularly common on rows of chimney pots. Buds of poplars (*Populus* sp.), clover (*Trifolium* sp.) on a small lawn, chunks of bread and Hawthorn berries (*Crataegus* sp.) were taken as food.

It was unfortunately impossible to continue with sufficiently intensive observation to establish the comparative density of nesting on houses and in trees in adjoining areas but it did become apparent that nesting in both continued to occur in fairly close proximity in at least three consecutive years.

Summary

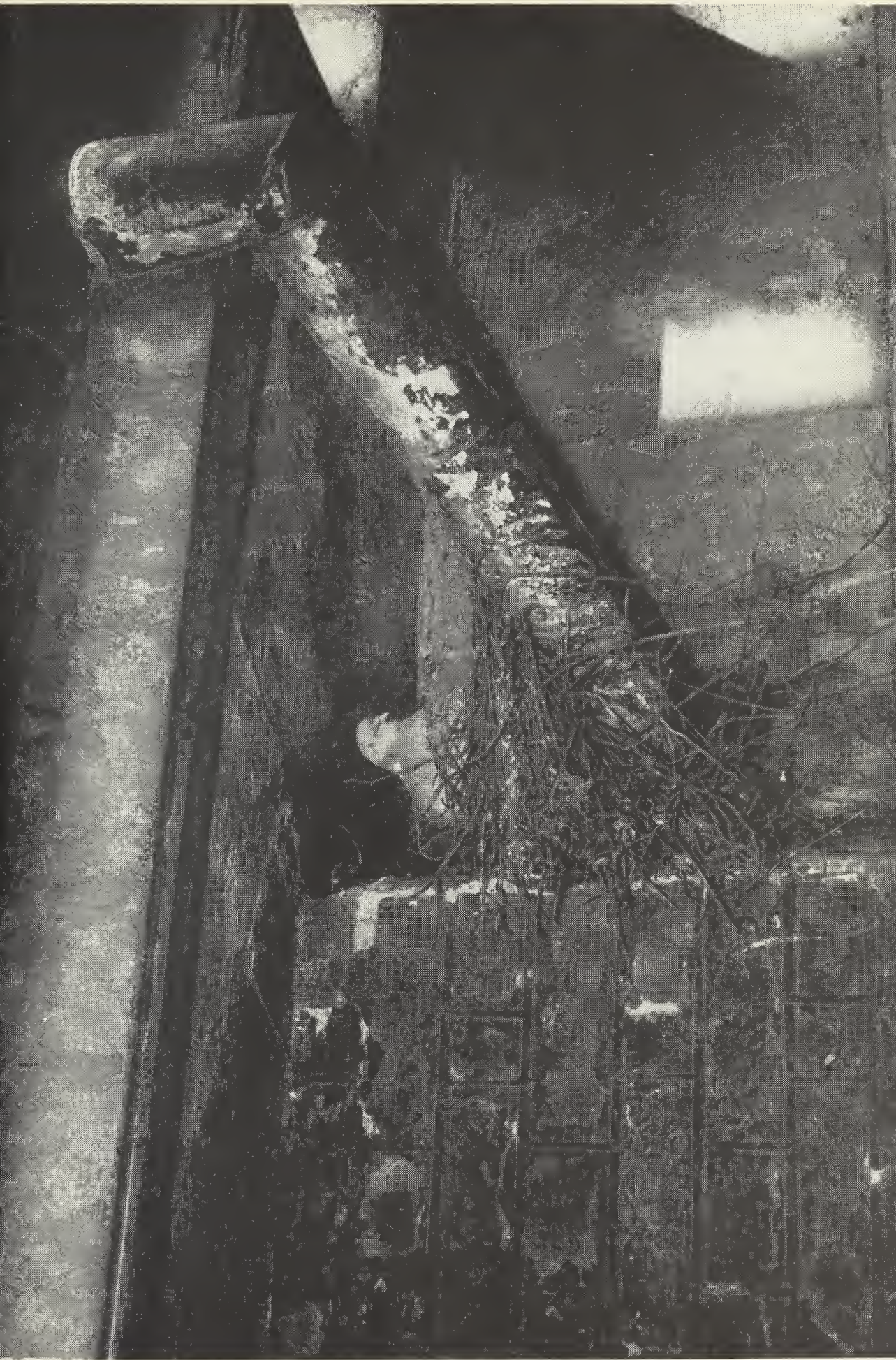
Observations of Woodpigeons in an area of Hampstead in 1962, 1963 and 1964 include details of nesting on buildings.

Acknowledgments

I am greatly indebted to Stanley Cramp for reading the original draft of this paper and to my wife for much help in the preparation of it.

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WOODPIGEON NESTING ON RAINWATER PIPE (photographed by R.E.F. Peal)

Black Redstarts Along the Lower Reaches of the River Lea

By B. S. MEADOWS

SINCE 1941, when Black Redstarts began colonizing the bombed sites, they have nested annually in Inner London; a peak was reached in 1949 when at least 14 pairs bred and an additional 13 singing males were located (see Homes *et al.*, 1957). With the gradual clearing of the bombed sites the Black Redstart population has shown a parallel decline and in 1963 only four males returned to the few remaining sites (London Natural History Society, 1956-64).

It is well known that over a wide area of Western Europe the species manages to breed successfully in a wide range of habitats. However, the records from the London Area suggest that our birds are closely attached to bombed sites: only the occasional breeding record has been received from the outer suburbs during the last decade. Nevertheless, the writer has often considered that the lower industrialised reaches of the Lea Valley between Ponders End and the Thames could provide a suitable breeding habitat for Black Redstarts, a hypothesis which was borne out during a survey carried out in this area by the author during 1964. During previous years, despite its close proximity to Inner London, much of this part of the Lea Valley appears to have been unexplored ornithologically. A brief discussion of the 1964 results forms the basis of this paper.

Distribution

The distribution of Black Redstarts located during the 1964 breeding season in the Lea Valley is shown on the Map. Readers are also referred to the Ordnance Survey (Sheets TQ 38 and TQ 39). The birds favoured areas such as gas works, timber yards and railway depots. These sites offer a wide range of buildings and adjacent patches of wasteland with bare soil and scanty vegetation. The principal area where this species occurs is between Stratford High Road and Canning Town Bridge. Although no Black Redstarts were found between Canning Town and the Thames, J. T. Smith saw a singing male at Bow Creek Wharf from May 20th to the end of June during 1963.

Breeding

Four breeding pairs were located and at least nine fledglings reached the flying stage; an additional six singing males appeared to be holding territory in the area. All the nests found were in holes in brick-built buildings between 14 and 20 feet above ground level. Singing perches included gas-holders, factory roofs, railway measuring gauges, walls and fences. One of the males present at Ponders End regularly sang from a

low fence, which was only three feet high, while a bird which held territory at Bromley-by-Bow Gas Works sang up to a height of about 45 feet.

Feeding Sites

An analysis of 48 feeding site observations between April and September, 1964, is set out in Table 1. This shows that birds were most frequently seen feeding on the ground, although roughland with tall herbaceous vegetation and no bare soil was avoided.

According to N. J. P. Wadley the food in Inner London consists chiefly of seeds, beetles, ants, flies, caterpillars, occasional imago moths and butterflies. In the case of the Lea Valley population it has only been possible on a few occasions to approach close enough to identify the food; the few records which have been obtained suggest that the diet is similar and seeds (from plants of the family *Compositae*) certainly appear to be eaten more frequently during the autumn.

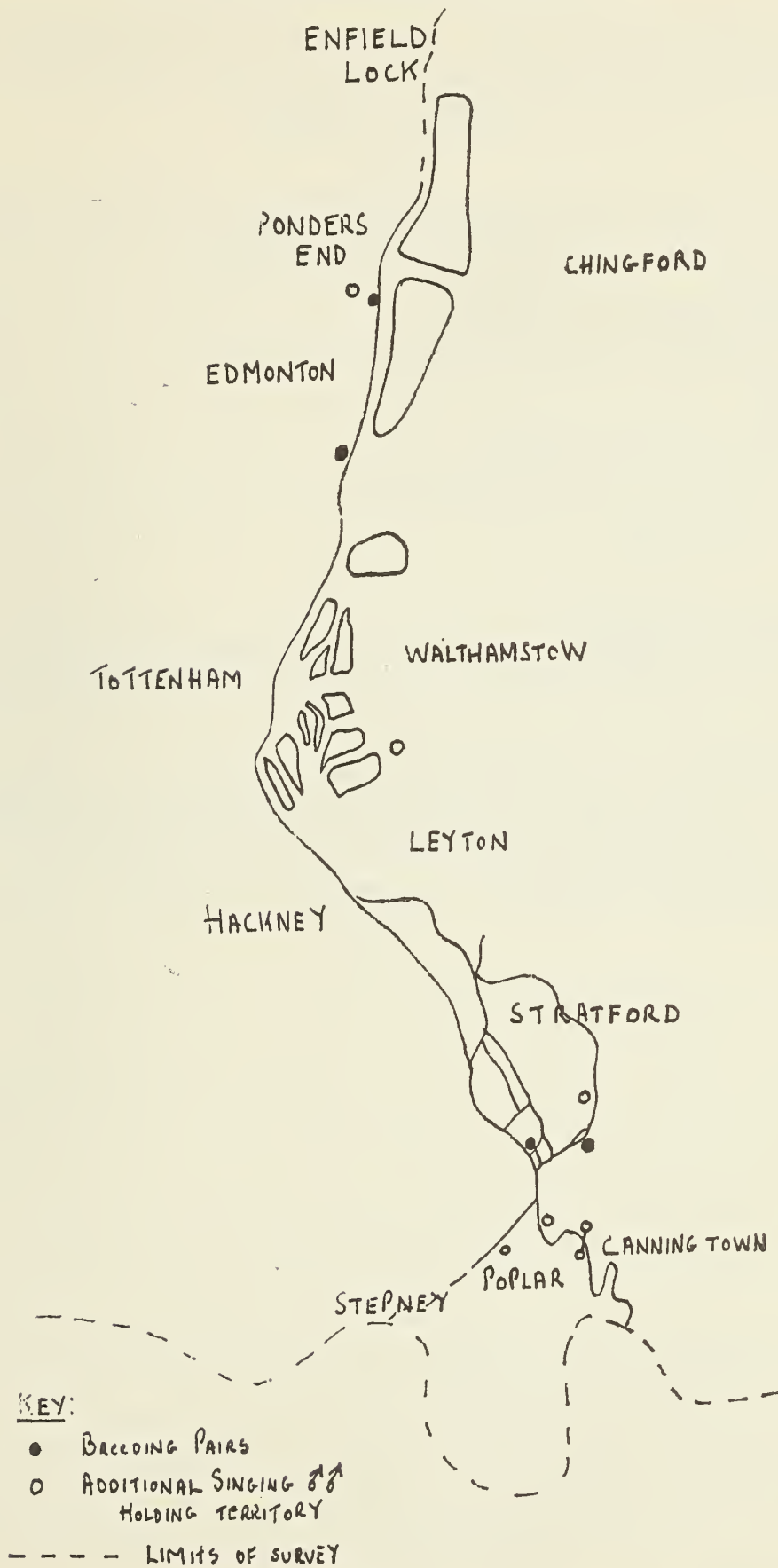
Two sites listed in Table 1 deserve special mention since they may be important in providing an additional source of food for the birds in the Lea Valley:

(a) On several occasions I saw Black Redstarts on the exposed mud along the tidal reaches of the Lea, where owing to the low amounts of dissolved oxygen and high percentage of organic solids a typical "clean-water" fauna is absent and animals more tolerant of low oxygen concentrations such as micro-crustaceans, worms of the family *Tubificidae* and dipterous larvae abound due to the absence of predators. The frequency with which Black Redstarts were seen on the mud suggests that the larger freshwater invertebrates, which become exposed at low tide, are taken.

(b) At Ponders End birds were seen apparently feeding on three occasions along a shallow concrete dyke. The dyke is used occasionally as an overflow from the Lea Navigation Canal. During 1964 the growth of filamentous green algae (*Chlorophyceae*) and *Nasturtium officinale* was so extensive—100% coverage—that Black Redstarts were able to "feed" from the blanket of vegetation covering the water course. Examination of the algae showed apart from springtails (*Collembola*), the crustacean *Asellus* sp. was the most abundant invertebrate. Saunders (Witherby *et al.*, 1938-41) says small crustaceans are taken by Black Redstarts on the coast in winter.

The Future

The wide range of buildings—many dilapidated—on the industrial estates should in the foreseeable future be able to provide suitable nesting sites. The British summer population is a colonizing extension from the Continent and providing that the European advance does not suffer a check it seems likely that how far the Lea Valley colony will be able to increase depends on the amount of suitable roughland adjacent to the nesting sites which is left undeveloped. If a proposal suggested by the Civic Trust (1964) materializes at least one area frequently used by Black Redstarts in 1964 will be lost. Conservation of this site and other similar places within the lower reaches of the Lea Valley is considered to be unpractical (London



MAP

Distribution of Black Redstarts located in the Lea Valley in 1964

Natural History Society, 1965). However, we can expect that small patches of waste land *within* the larger gas works and timber yards, along the river towpaths and many railway sidings will remain.

TABLE 1
DISTRIBUTION OF FEEDING SITES OF BLACK REDSTARTS IN THE LEA VALLEY.
APRIL-SEPTEMBER, 1964
(Analysis based on 48 observations)

GROUND							
	Bare Soil with no vegetation	...	...	...	...	...	7
	Bare Soil with scant vegetation (e.g. river towpaths)	...	...	...	...	...	14
	Short vegetation with no bare soil (e.g. lawns)	...	...	...	...	...	4
	Tall vegetation with no bare soil	...	...	...	...	...	0
WATER							
	Concrete reservoir banks	...	...	...	...	...	4
	Exposed mud of tidal reaches of Lea	...	...	...	...	...	7
	On blanket weed covering water course	...	...	...	...	...	3
AIR							
	"Fly-catching"	...	...	...	...	...	9

Acknowledgements

W. R. W. Bradman and J. T. Smith kindly supplied information which has been used in the discussions on breeding and feeding sites, respectively.

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Book Reviews

THE WORLD OF BIRDS: a comprehensive guide to general ornithology by James Fisher and Roger Tory Peterson (Macdonald, 1964).

The magnificently ambitious plan of this book, matched by the quality of its production, carries the reader at a dashing pace through almost every topic that ornithologists have ever talked, thought or dreamed about. Almost the only one which seems to be missing is any reference to nest sanitation—not perhaps too great a loss!

The subject matter falls roughly into three main groups. First, the authors, who between them have certainly managed to see their fair share, marshal the world's birds in review, a task which has been attempted several times in recent years, and must inevitably be somewhat selective in a volume which can be handled. It is doubtful if the selection has ever been better done, or illustrated at a more consistently high level of perfection. One can scarcely believe that even Roger Tory Peterson has seen all these birds alive, or even photographs of them, but it would be difficult to pick out a portrait that does not give the impression that he knows the "sitter" like the back of his hand. Of the 140 pages devoted to the review, about two thirds comprise James Fisher's distribution maps of the 199 Families, extant and extinct, which the authors recognize—each one of them specially designed to give the greatest possible information with minimum loss of clarity. In the present state of knowledge, there is inevitably some guesswork and wishful thinking, but nevertheless this is a real tour de force, which has never previously been attempted on such a scale.

The second and third main subjects take up less space, although they are perhaps the ones with the most immediate impact and interest for the London ornithologist (who incidentally gets only a rather brief mention on p. 110 under the heading "Local records"). They comprise, respectively Bird Behaviour (30 pages) and what might be called the direct relationship of Birds and Man (87 pages), in all its varying aspects, from fowling and hunting to the wearing of bird-club ties. Mention should also be made of the remaining 31 pages, making up this handsome 288-page worth: they cover an introductory section on anatomy, a useful bibliography, and an index of the 1,173 species (about an eighth of the birds of the world) which find a place in the text or illustrations.

The great virtue of this book is that without quailing at controversy or eschewing the inspired guess (and two authors with better qualifications for guessing would be hard to find), it fairly and squarely places birds in their biological setting on a world scale, without losing coherence or overwhelming the reader's critical sense. "Aha!" he cries, "they've overlooked *this* or got *that* a bit wrong". What better or more enjoyable way could there be for stimulating the search for knowledge, understanding and, not least, beauty which is the mark of the true ornithologist.

H.F.I.E.

ENJOYING ORNITHOLOGY. By David Lack. Methuen & Co. Ltd., 1965.

"The most memorable days for a naturalist combine grandeur with novelty, the beautiful with the rare or unexpected".

Thus Dr. Lack starts a chapter in his latest publication and this sentence is an excitingly typical example of the prose style used throughout and which makes the reading an effortless and delightful experience.

The book brings together a collection of the Author's broadcast talks and articles, taken from such journals as *Ibis*, *Bird Notes*, *British Birds*, *Scientific American*, etc., and welds them into an eminently readable miscellany which deserves to occupy a place on the bookshelf of anyone interested in ornithology. In addition to the scientific papers, which deal with migration in all its aspects, there is a section on some eminent ornithologists, another on Darwinian Evolution and finally one labelled "Entertainments" which includes, amongst other things, an Ornithological Examination Paper of engaging interest and ingenuity, and a highly amusing chapter in which fun is poked at some of the ornithological world's more famous characters. For those interested in the history of the Robin's place in Christmas folk lore, Dr. Lack provides an interesting commentary.

To those involved in the task of encouraging individuals to take up original research, the book will come as a godsend and if, as it seems certain so to do, it results in a greater interest and involvement in this branch, it will have fulfilled an important function and justified itself on that count alone.

Everyone should own this book, not only for what can be got out of it in the way of interest, knowledge and stimulation, but also because of the not unimportant fact that the Author has donated all royalties to the Royal Society for the Protection of Birds.

J.C.

Beddington Ringing Station, 1964

IN 1964 only 444 birds of 30 species were ringed, which although well above last year's total can only be contrasted with the ringing totals for Beddington in its heyday. As usual swifts accounted for far more rings than any other species (191). Apart from two all the swifts were ringed on one day when we ran out of rings and unfortunately owing to various difficulties, mainly the postal strike, no more rings were received until too late.

No recoveries of note were received during the year.

Over twenty pairs of Yellow Wagtails used to breed at Beddington, but compared with this about ten pairs attempted breeding in 1964 and their success rate was very low. Some variants still occur. A similar story can be told for many species: Redshank attempted to breed but it is extremely doubtful whether they were successful and even Lapwing achieved little more. Three pairs of Black Redstarts bred successfully by the cooling towers.

The more interesting records of visitors are given in the systematic list.

We are grateful, as ever, to Mr. E. Hodgson, B.Sc., M.Inst.S.P., for his co-operation and allowing us complete access to the farm.

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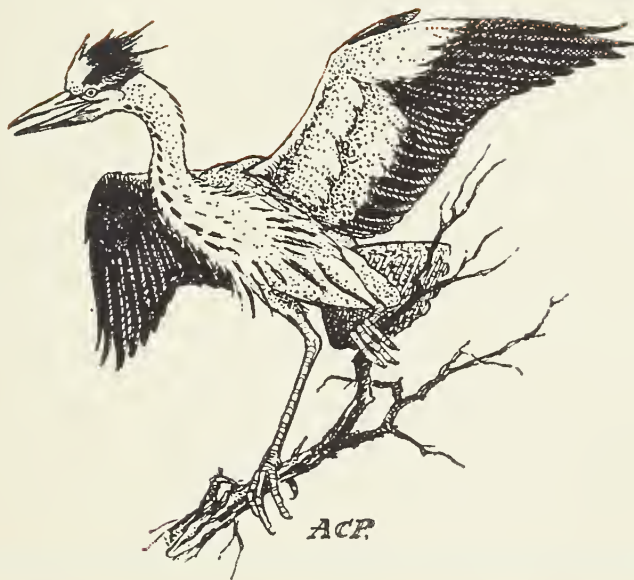


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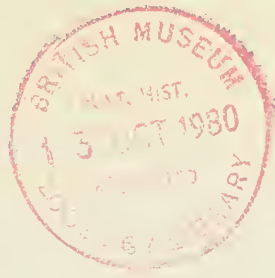
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THE LONDON BIRD REPORT

Edited by F. H. JONES

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B. A. MARSH

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D. I. M. WALLACE

Introduction

SECURING the fullest possible information about the birds of the London area is one of the most important functions of the Ornithological Section of the London Natural History Society. Much voluntary labour goes into preparing and bringing to the members the London Bird Report, and much gratitude is felt towards those who send in records without which this Report could not appear and especially towards those who ease the life of the Recorders by sending with their records the fullest details of all species for which such information is requested (see p. 9). Nevertheless there are still many gaps in our knowledge and a determined effort is being made to cover these. A working party has been set up by the Section with the express purpose of obtaining more intensive coverage of the London area on a permanent basis. In the mean time, however, the need for records cannot be too strongly stressed and members are reminded that what may be a common bird in a rural area may be a rarity in London. This in itself can add spice to watching birds in London. It should, however, be borne in mind that the interests of the birds themselves must come first and that all records should be obtained without damage or disturbance to the birds; especial care is needed during the breeding season when disturbance may expose the bird to natural as well as human predators.

The research projects too need assistance. The slightly increased participation in these noted last year has regrettably not been maintained.

Since much of the information required by organisers can be gleaned during a normal days birdwatching, it would seem that the main difficulty is a reluctance to communicate. It is for instance highly improbable that only the organiser of the Black Redstart enquiry has this year seen singing males, but this must be inferred judging by the paucity of reports. Our knowledge, other than their presence or absence, of the species in the Society's area is in most cases minimal, but only with the assistance of members can this be improved and the full picture drawn.

Current research projects for which assistance from members is earnestly solicited include one into the breeding status of the Kestrel and another into the distribution of the Black Redstart. The importance of the former as a possible indicator of the influence of toxic chemicals has recently been demonstrated and it is highly desirable that an accurate picture of its breeding strength in the London area be assessed. Stanley Cramp is organising this enquiry but records should be submitted in the first case to the recorders. Bryan Meadows, whose paper in last year's report made such an impact, is conducting a survey of the current status of the Black Redstart with particular emphasis on its possible colonisation of areas other than bombed sites in view of the redevelopment of the latter. In addition the section will continue to support the Rubbish tips enquiry by A. Gibbs and the efforts of John Gooders to trace the inner breeding limits of Swifts and House Martins (see p. 3 for details).

There have been no changes in the team responsible for the *London Bird Report*, 1965 and this continuity is valuable in assisting the production of the report.

Our congratulations are offered to Stanley Cramp, such a strong supporter and active worker for the Society and the Section, on his becoming Chairman of the Royal Society for the Protection of Birds for which he has done such valuable work on toxic chemicals.

A paper on Lapwings by Paul Moxey is to be found on p. 60, and an account of the bird life of Bishop's Park, Fulham, by P. J. Strangeman on p. 80. There are also three book reviews.

ACKNOWLEDGEMENTS

The Records Committee wishes to thank all those who have contributed to this Report and also to welcome new members of the Society. The Editor is most grateful to the members of the Editorial Committee and the Records Committee and especially to Messrs. R. C. Homes and B. A. Marsh who were responsible for much of the compilation of the systematic list and to the Recorders. He also wishes to thank Mr. L. Roberts for the loan of the photograph of the Temminck's Stint and Mr. A. C. Parker for the cover drawing of a Heron.

Assistance in the exchange of records and information was given freely by the Editors of *British Birds*, the late Mr. D. D. Harber (Secretary to the B.B. Rarities Committee), the officers of the British Trust for Ornithology, the Essex Bird Watching and Preservation Society, the Hertfordshire Natural History Society, the Kent Ornithological Society, the Surrey

Bird Club, the Zoological Society of London and the Committee on Bird Sanctuaries in the Royal Parks. Members also have to acknowledge many kindnesses from the Metropolitan Water Board, the Greater London Council and the Croydon Corporation.

Research Projects

Rubbish Tips

Volunteers are required who are willing to count gulls visiting such tips, especially during the months of November, December, January and February. Much valuable information has come out of this enquiry, now in its fifth year, but more is needed. Offers please to:

A. GIBBS, 271 Great North Way, Hendon, N.W.4.

Swifts and House Martins

This is an enquiry to trace the inner breeding limits of these two easily observed species. It is probable that in most parts of London the inner limits of both Swifts and House Martins lie inside a circle of ten miles' radius from St. Paul's. All records are wanted of birds frequenting possible breeding sites within this range, with particular emphasis on maximum numbers seen at one time in May and June. For Swifts watch should be kept for entry under the eaves of houses, and for House Martins the number of nests should be given with details of occupation when possible. Please get in touch with the organizer:

J. GOODERS, 1 Gorst Road, S.W.11.

Kestrels

This enquiry is being organized by Stanley Cramp with a view to obtaining the fullest possible information as to the breeding status of the Kestrel in the London area. Members are asked to submit all records of Kestrels in the London area during the breeding season to the Recorders.

Black Redstart

This is a survey into the current status of the Black Redstart and members are asked to send all records of Black Redstarts in the London area to the organizer, who will be pleased to give any other information.

BRYAN S. MEADOWS, 20 Bell Lane, Broxbourne, Herts.

The Year

JANUARY TO MARCH

The 1964-65 winter followed much the same pattern as that of 1963-64, being generally mild with a few spells of severe weather, all of which were short, conditions favourable to birds. On January 1st there was a Slavonian Grebe on the Grand Union Canal at Cassiobury Park, and a concentration of 500 Redwings at Beddington S.F. The Ferruginous Duck which was present at King George VI Res. from Dec. 19th to 31st, 1964, was seen again on Jan. 2nd and 3rd but not subsequently. On the 4th seven adult Bewick's Swans flew over Hampstead Heath and on the same day four Spotted Crakes were found at Cassiobury Park; there were two on the following day, and singles on several dates until Mar. 4th. In Inner London a roost of Goldfinches in plane trees near the Natural History Museum was discovered on Jan. 4th. This roost reached a peak of 105 on Jan. 23rd and was last seen in use on Apr. 6th when there were 13 only. The largest number of Cormorants recorded during the year was 80 at a roost at Queen Elizabeth II Res. on the 10th. On the 14th a Common Sandpiper was seen at Rye Meads. Another party of seven Bewick's Swans was seen at Brent Res. on the 20th, this time consisting of one adult and six immatures. A Little Stint at Swanscombe on the 21st made this the fourth winter in succession in which this species has been recorded in our Area. On the same day an adult Gannet, exhausted but in excellent condition was apprehended in Deptford High Street and taken to the Police Station. On the 23rd the largest flock of Golden Plover for the year, *c.* 250 was seen at Staines Moor. A Red-throated Diver was present at Hilfield Park Res. on the 24th and again on the 30th. A Red-necked Grebe first seen at Queen Mary Res. on the 24th remained until Mar. 24th. The largest number of Jack Snipe for the year was seen at Worcester Park S.F. on the 24th, and on the same day a Buzzard was recorded at Perry Oaks S.F. The only large flock of wild geese was a party of 37 White-fronts flying N. at Darenth on the 25th. There was a Great Grey Shrike throughout the month of January at Hainault Forest.

The largest concentrations of several species occurred in February: 364 Fieldfares at Cuffley on the 13th; 70 Bullfinches at Ridge on the same day; *c.* 600 Shelduck at Stone on the 21st, and *c.* 150 Bramblings at Queen Mary Res. on the 28th. The winter flock of Ruffs at Perry Oaks S.F. reached its peak of 17 on the 14th. Two Merlins were seen in February, one flying W. at Regent's Park on the 13th and one seen to take a Starling from a chimney stack at Broomfield Park on the 19th. A Buzzard drifted S.E. in the Nazeing-Broxbourne area on the 20th. On the following day a Fulmar was found freshly dead with a broken wing at Littlebrook after a strong E. wind. There was a Common Sandpiper at Rye Meads on the 13th and two at Old Parkbury on the 14th, and Hooded Crows at Wanstead Park on the 25th and at Ruxley on the 26th and 28th.

The first few days of March were cold and on the 4th, when there was a heavy snowfall, 150 Skylarks and 70 Lapwings flew S.W. in small flocks at Danson Park, and there was a concentration of 800 Lapwings at Sevenoaks. On the 6th two adults and three immature Bewick's Swans arrived at King George V Res.; the adults were, unfortunately, shot later. On the 7th there was a Great Northern Diver at King George V Res. and on the same day a concentration of 1,500 Tufted Duck and 500 Pochard at Staines Res. By the 9th Lapwings had begun to move N.E. The rest of the month was uneventful. There was a Hooded Crow on the 13th at Hampstead Heath, a Red-necked Grebe at the Staines reservoirs on the 21st and 27th, and a Twite at Riddlesdown on the 27th. During the month the largest number of Siskins for the year was seen at Fisher's Green in an area which was once part of the Royal Gunpowder Factory, and was planted with large numbers of Alders as a source of charcoal. During the month the first spring migrants began to arrive. The first Wheatears were seen on the 23rd, and they were widespread by the 28th. A male Ring Ouzel was seen at Regent's Park on the 31st. Bearded Tits were seen at three localities during the first three months of the year.

Spring movements and the Breeding Season

On the 1st of April there was a Firecrest at Kenwood, and two days later a male Marsh Harrier flew over Hampstead Heath. On the 4th, a Crossbill flying E. at Leatherhead was the last seen during the year. On the following day an early Swift was seen in Surrey, but in general the arrivals of summer migrants were disappointing until the end of the month. The only Knot seen during the spring was present at Perry Oaks S.F. on the 10th. Red-necked Grebes were seen at Staines Res. on Apr. 7th and 17th. In Surrey, a Dipper of the British race was trapped and ringed at Gibbs Brook, near Godstone, on the 13th. A Bar-tailed Godwit was seen at Sevenoaks on the 17th and two Pink-footed Geese flying N. at Cheshunt G.P. on the 21st. There was a Spotted Redshank at Perry Oaks on the 24th and a Hoopoe in Richmond Park on the following day. On the 30th there was a total of 28 Black Terns at two localities, and four Bar-tailed Godwits were seen at Staines.

The first of May brought a considerable movement of delayed migrants. There were at least 92 Black Terns in the Area, and well over 100 Common/Arctic Terns, while at Rye Meads 14 Sandwich Terns were seen flying S. On the same day there was an Osprey at Ruxley, and another Bar-tailed Godwit at the Brent Res. By contrast two late Fieldfares were seen at Beddington S.F. on the same day. On the 4th, 15 Whimbrel were seen flying N. at Broxbourne, there was a first summer Little Gull at King George VI Res. and a Hoopoe at Weybridge. On the 6th, an early date, a Marsh Warbler was in full song at Sevenoaks, and in the same area another Hoopoe was seen. The peak of the Swift passage occurred on the 9th, when many thousands were involved. Grey Plovers were seen at Staines and Queen Mary Reservoirs from the 11th to 13th and there were 17 Black Terns at Staines on the 12th. A Quail was seen at Chigwell on the 13th

and a Wood Sandpiper at Broxbourne on the 14th. Another Hoopoe was seen at Biggin Hill on the 16th, 11 Sanderling at Perry Oaks on the 18th and another Wood Sandpiper at Hershams S.F. on the 22nd. Black-necked Grebes were seen at three reservoirs during the month. A Golden Oriole was heard in Epping Forest from May 30th to June 7th. A male Cirl Bunting had been seen on Wimbledon Common on May 1st and 11th, and another was carrying food at Brand's Hatch on June 7th. On the latter date a Buzzard was noted circling high over the Tulse Hill and Brockwell Park area. Two Greenshanks were seen at Perry Oaks on the unusual date of June 24th, and there was a Black-necked Grebe at Barn Elms from June 15th to 27th.

The appearance of passage migrants is much better documented than the breeding distribution of all but a few species. Records of breeding of all but the commonest species would be welcome. It is emphasised that it is possible to obtain evidence of breeding without causing undue disturbance to the birds or disclosing the nest to predators.

Records suggest that there were nearly 50 pairs of Great-crested Grebes breeding in the Area, but Little Grebes were very little reported. Although they were much reduced in the 1962-63 winter, there must be many breeding pairs which are not recorded. The number of Herons' nests was again reduced, to 63. A Teal's nest containing three eggs was found at Fisher's Green after the end of the breeding season. At least 100 pairs of Tufted Ducks were present and 53 broods were seen. No reports of breeding Sparrow-hawks were received for the second year in succession, but Kestrels appear to be maintaining their numbers. Quail were present in the Darent valley again this year, but no reports of breeding were received. One was heard calling on three dates at Chelsham Court. Two pairs of Ringed Plover bred at Swanscombe, and a pair at Belvedere S.F. Some 36 pairs of Little Ringed Plover were present at 26 localities of which 33 pairs bred or attempted to do so. Only two pairs of Snipe were reported as breeding. There were breeding season records of Woodcock from Essex, Herts. and Surrey, the largest number roding in any area being nine on June 14th at Warley. Two presumed pairs of Common Sandpipers remained at Hornchurch Chase throughout June and July, but breeding was not established. About 14 pairs of Redshank were reported as breeding or probably breeding and several other pairs were present. Black-headed Gulls did not breed in the Area for the first time since the early 1940's. There were three pairs of Herring Gulls at Regent's Park and one pair at St. James's Park, but breeding did not take place. Several Common Terns were present in the Lea valley at Nazeing and Broxbourne during the summer, but there was no evidence of breeding. Ten pairs of Collared Doves were known to have bred, but there were many more present. The status of the owls is still difficult to assess, but the Tawny is by far the commonest. There were about nine pairs of Kingfishers of which at least three pairs bred. The Great Spotted is the commonest Woodpecker; the Green may even be suffering a further decline following its losses in the 1962-63 winter. The number of pairs of Wryneck breeding may have been as high as 15. At least one pair of Woodlarks

bred in Kent. The Skylark, which suffered heavy losses in the 1962-63 winter, continues to make a good recovery, as does the Long-tailed Tit at a lower rate. The Wren in many localities is back to the level of 1962. A pair of Wheatears summered at Littlebrook, but there was no evidence of breeding. Five or six pairs of Whinchats bred. Only ten pairs of Black Redstarts bred compared with 12 in 1964. One pair of Wood Warblers were reported as breeding, but there were a number of singing males, mostly S. of Thames. The Goldcrest is still scarce as a breeding species, although it is probably much overlooked. About ten pairs of Grey Wagtails bred compared with only four in 1964. There was a further reduction in the breeding population of the Red-backed Shrike. RVW reported 67 singing Corn Buntings in the Darent valley.

Autumn movements and the beginning of winter

As is frequently the case, return passage, particularly of waders began early in July, but on a small scale. Four Black-tailed Godwits were seen at Maple Cross on July 15th. One of the few Curlew Sandpipers reported was at Rainham Marsh on July 30th and there was another there on Aug. 5th. Passage was much heavier in August. There were 52 Black Terns on the 10th, and the largest flock of Ringed Plover, *c.* 200 was present at Rainham Marsh on the 13th. On the 17th an Aquatic Warbler was identified at Beddington S.F. There was a Hoopoe at Woolwich on the 19th, the only autumn Knot at Rainham Marsh on the 23rd and 29 Ruff at Romford S.F. on the same day. The autumn peak for Common/Arctic Terns came on the 28th when 120 flew up river at Dartford in 1½ hours.

September proved to be the most interesting month. There were up to ten Little Gulls at Staines in the early part of the month. On the 2nd a Buzzard was seen at Perry Oaks. On the 4th a Bluethroat was caught and ringed at South Ockenden, and there were 28 Ruff at Perry Oaks. On the 5th and 7th there was a Temminck's Stint at Barn Elms, and a fine photograph of this bird appears opposite page 32. On the 5th there were 30 Black Terns in the Area and on the 9th, 30 Ringed Plover at Perry Oaks S.F. On the 17th an immature Osprey was first seen at Queen Mary Res. and stayed in the area until Oct. 3rd. Another Osprey, an adult, flew over Regent's Park on Sept. 19th. On the 24th there was a further movement of Black Terns. The outstanding record for the year was an Alpine Swift seen near West Hyde on the 26th.

The annual irruption of Bearded Tits was first noted at Navestock Park when three were trapped and ringed on Oct. 6th, and birds were noted at five other localities subsequently, the largest number being 12 at Rye Meads on Oct. 22nd, two of which had been ringed at Walberswick. The first substantial movement of Fieldfares and Redwings was noted at Farthing Down on Oct. 9th and 10th. About this time an invasion of Waxwings was beginning on the East Coast, but the first noted in our Area was a single bird at Oxshott Heath on Oct. 19th and they were not widespread until the end of November. The largest flock reported was *c.* 40 at Merstham at the end of the year. A Great Northern Diver

first seen at the Penn Ponds in Richmond Park on Oct. 13th remained until Nov. 3rd. The first Great Grey Shrike of the autumn was seen on the 22nd. There was a Hen Harrier at Epsom Common on Nov. 4th and a Ferruginous Duck at Brent Res. on the same day. Also on the 5th, *c.* 700 Fieldfares flew N.W. at Sewardstonebury in one hour. On the 7th there was an immature Whooper Swan on the Brent Res.

There was a marked influx of Shags on or about Nov. 22nd at five localities, all but one described as juveniles. Of 15 juveniles seen on that date at Walthamstow Res., two had been ringed at the Isle of May in the previous June. At least six were still present at the end of the year. On the 23rd a Snow Bunting was seen at Queen Mary Res. and a second year Glaucous Gull at Sevenoaks on the 25th and 30th. Another Great Northern Diver was seen at Farningham Road pools on Dec. 1st. A Chiffchaff fed on bread and fat in a garden at Sunbury from the 8th to 10th, and later in the month, a Willow Warbler or Chiffchaff was seen at Woodford Green on the 24th. A Long-tailed Duck was present at Queen Elizabeth II Res. on the 12th and 19th. On the 13th there was a notable flock of 900 Teal at King George VI Res. A very unusual occurrence was an oiled Guillemot in St. James's Park on the 22nd. There was a substantial flock of Golden Plover, *c.* 200, at Staines Moor on the 24th, and on the 28th during severe weather, eight Bar-tailed Godwits were seen flying S. at Elmers End S.F.

Recording Arrangements

THE Society's Area is bounded by a circle of 20 miles radius centred on St. Paul's Cathedral. The recorders welcome records from members and non-members. It will assist the speedy entering of records if the following points are observed.

1. Please enter records on the Society's record sheets, which may be obtained from the recorders, in Wetmore Order (as used in the London Bird Report). Use separate sheets for each county (except Bucks to be included with Middlesex) and for Inner London, and send them to the appropriate address below, in July for the period January to June and the beginning of January for July to December. Please give locality names accurately with map reference in any difficult or doubtful case.
2. Please submit copies of field notes for all species indicated below. It would greatly assist the recorders if these supporting notes were written on separate sheets of paper for each species and attached to the appropriate record sheet. If the species is one which should be considered by the *British Birds* Rarities Committee (see list in *British Birds*, Vol. 59, No. 7, July 1966, pages 304-305) please submit your notes to that Committee as soon as possible, and send the recorder a copy, advising him that the record has been sent to *B.B.* Do not wait until you submit your record sheets.

All rare species	All Skuas
All out of season Migrants	All Gulls of irregular occurrence including Glaucous Gull, Iceland Gull, Little Gull and Kittiwake
All Divers	Terns of irregular occurrence
Grebes other than Great Crested and Little	All Auks
All Petrels and Shearwaters	Long-eared Owl, Short-eared Owl
Gannet and Shag	Wryneck
Hérons other than Common Heron	Willow Tit away from regular haunts
All Bitterns	Ring Ouzel
Scaup, Ferruginous Duck, Long- tailed Duck	Unusual Warblers
All Geese	Firecrest
Whooper and Bewick's Swans	Races of <i>Anthus spinoletta</i> other than <i>petrosus</i> (Rock Pipit)
All birds of prey except Kestrel	White Wagtail in autumn
Quail	Races or mutants of <i>Motacilla flava</i> other than typical <i>flavissima</i> (Yellow Wagtail)
Rails and Crakes, except Water Rail, Moorhen and Coot	Waxwing
All waders of irregular occurrence, and in addition Whimbrel, God- wits, Wood Sandpiper, Spotted Redshank, Temminck's Stint, Phalaropes	Shrikes other than Red-backed Shrike Twite, Crossbill, Cirl Bunting, Lap- land Bunting, Snow Bunting

Records of the above species are currently considered by the Records Committee before being accepted for publication in the *London Bird Report*. All records published in the Systematic List must stand the scrutiny not only of readers today but also of those who may refer to the *L.B.R.* in the future, all of whom have the right to presume that records are based entirely on correct identification supported by evidence.

The Records Committee wish to thank all who already send in records and invite those who have not contributed to do so, thereby helping to make the *L.B.R.* a comprehensive account of the ornithology of London.

Recorders

Inner London	...	...	...	A. D. TOMLINS, 29 Gerard Road, Barnes, S.W.13.
North of the Thames	...	...	...	c/o B. L. SAGE, 11 Deepdene, Potters Bar, Middlesex
Bucks. and Middx.	...	...	...	P. J. OLIVER
Essex	...	...	...	B. S. MEADOWS
Herts.	...	...	...	B. L. SAGE
Surrey	...	...	...	B. A. MARSH, 19 Grasmere Avenue, Kingston Vale, S.W.15.
Kent	...	...	...	C. E. WHEELER, 3 Woodhurst Close, Cuxton, Rochester, Kent.

NOTE: Records from the River Thames should be treated as occurring in the county bordering the river to the South, i.e. in Surrey or Kent.

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(continued on p. 79)

Birds of the London Area, 1965

A REPORT OF THE BIRD LIFE WITHIN TWENTY MILES OF ST. PAUL'S CATHEDRAL

THIS report follows the British Ornithologists' Union's "Check-List of the Birds of Great Britain and Ireland" (1952) based on the Wetmore classification, and the numbers preceding each species refer to that List where the full scientific name will be found. The vernacular names are those adopted by the Editors of *British Birds* magazine as announced in January, 1953 (*B.B.*, 46:1).

All records are for 1965 except where otherwise stated. The initials following each record refer to the observer(s) responsible for it, whose name(s) may be obtained by reference to the list of contributors on page 10.

The six counties within the circle of twenty miles radius are indicated by their initials, *viz.*:—E=Essex; H=Herts.; M=Middlesex; B=Bucks.; K=Kent; S=Surrey. Several of the Lea Valley reservoirs are partly in Middlesex, but all records referring to them are published under Essex, following the policy adopted by W. E. Glegg in his histories of the birds of Essex (1929) and Middlesex (1935). The following abbreviations are also used:—*B.B.*=*British Birds* magazine; *E.B.R.*=*Essex Bird Report*; *L.B.R.*=*London Bird Report*; G.P.=gravel pit; Res.=reservoir; S.F.=sewage farm; N., E., S., and W., are used for the cardinal points of the compass, but are intended only to indicate the general direction of flight; mo=many observers.

An open map of the London Area will be found useful for a full appreciation of many of the records. As the history of some of the species is intended to be continuous, reference to the Society's book *The Birds of the London Area* and to the systematic list of previous issues of the *L.B.R.* is recommended.

2 Great Northern Diver

- E King George V Res., one on Mar. 7th was thought to have been of this species (JCE, PJV).
- K Farningham Road pools, one on Dec. 1st (DFM).
- S Richmond Park, one on Penn Ponds from Oct. 13th until at least Nov. 3rd (BAM, EMS *et al.*).

4 Red-throated Diver

- H Hilfield Park Res., one on Jan. 24th and 30th (BLS).

5 Great Crested Grebe

In the winter of 1965-66 the largest number on the wildfowl count dates was 621. Direct comparison with the previous winter is

impossible as no figures for Staines were then available, but there is an impression that the numbers may be slightly down.

- E Navestock Park, one pair reared two young (BSMs). Nazeing G.Ps., 14 adults on May 1st (AEG, JAH). Walthamstow Res., 16 pairs reared young (JF).
- M Canons Park, one pair reared two young (EHW). Nests reported at Osterley Park and Stanwellmoor G.P. Maximum count, 235 at Queen Mary Res. on Nov. 14th.
- K Bred at Brooklands Park, Dartford (1 pair), Lullingstone (2), Ruxley (2), Sevenoaks (2, one nesting on a raft), Sundridge (1), Darenth G.P. (1), Sutton-at-Hone G.P. (1). On gravel pits between the A.2 and A.20, including the last two, six pairs were seen on May 29th, and at Stone there were two pairs on Apr. 5th.
- S Bred at Gatton (2), Godstone (1), Ham Moor G.P. (1), South Norwood (1) and Thorpe G.Ps. (1). In some cases more birds were seen but not proved to breed. Present also in breeding season at New Lines Pond, Oxshott clay-pit and Silvermere. There were 141 at Island Barn Res. on Jan. 2nd and 150 + at the nearby Walton Res. on the same date.

6 Red-necked Grebe

- E/H Cheshunt, one on a gravel pit on the county boundary on Feb. 22nd may have been the same bird as was seen on that date on the Lea Navigation Canal (JAH, AEG, ART).
- M King George VI Res., one on Mar. 27th (DMP). Queen Mary Res., one from Jan. 24th (GCG) to Mar. 24th (BEC). Staines Res., one on Feb. 13th (MJR), Mar. 21st (DMP), Apr. 7th and 17th and Nov. 4th (MJR). It seems probable that there were two birds in all in Middlesex in the early part of the year.

7 Slavonian Grebe

- H Cassiobury Park, one on Grand Union Canal on Jan. 1st (JRB).

8 Black-necked Grebe

- E Girling Res., one from Aug. 1st to Oct. 16th (JCE, JF). King George V Res., one on May 15th and from Sept. 5th to 9th (JCE).
- M Brent Res., one on Nov. 3rd (LAB). King George VI Res., five on Aug. 12th when there were seven at Staines (JA). Staines Res. three on May 1st and 2nd (MJR, DMP); first autumn bird on July 15th but not more than one until four on Aug. 11th and seven on the 12th. Only two after this until 29th when there were six, numbers remaining at about this level until Sept. 12th when there were 11. Fourteen on Sept. 21st, nine on Sept. 25th and Oct. 5th, ten on 17th and then not more than three until Nov. 26th. One on Dec. 12th and 19th and two on 26th.
- S Barn Elms Res., one from May 11th (PEF, JMS) to 29th and again from June 15th (PEF) to 27th (PJSn).

9 Little Grebe

Once again this species was very little reported in the breeding season. Nesting or presence then only reported from Wanstead Park (Essex), Bushey Park (Middlesex), Littlebrook, Squerreys Lake and Woolwich Arsenal (Kent), Ashtead Park, Bookham Common, Esher, Gatton Park, Godstone, Kew Gardens, Oxshott, New Lines Pond and Thorpe G.Ps. (Surrey). Although from the absence of any reports of sizeable post-breeding flocks it seems as if numbers may still be low after the 1962-63 winter there must be many more breeding pairs than are recorded, and all information should be sent to the recorders.

26 Fulmar

K Littlebrook, one found freshly dead on Feb. 21st after strong east wind. Wing broken at carpal joint (AW).

27 Gannet

K Deptford High Street, an adult exhausted but in excellent condition, apprehended and taken to the Police Station on Jan. 21st (ACP).

28 Cormorant

This species continues to winter in the Thames valley in about the same numbers. Maximum 80 on roosting platform at Queen Elizabeth II Res. (Surrey) at dusk on Jan. 10th (DP). Small numbers in latter part of the year probably explained by incomplete recording, but 23 at King George VI Res. on Aug. 12th and similar numbers in Nov. and Dec. In Essex and Herts. only occasional single birds. Inner London: four records of birds in flight.

29 Shag

There was a very marked influx on or about Nov. 22nd when a total of 22 birds, of which all but one were described as juveniles, were found in four counties. Five are known to have died where first seen.

E King George V Res., one on Apr. 24th (KB); four juveniles on Nov. 22nd (JCE) of which two were later found dead and the last one seen alive was on Dec. 26th (JF). Walthamstow Res., 15 juveniles on Nov. 22nd (JF) of which two subsequently found dead had been ringed on the Isle of May in previous June; six still alive at the end of the year.

M Queen Mary Res., a juvenile on Nov. 23rd (BEC) and 27th (SGd).

K Sevenoaks, a juvenile from Aug. 29th to Sept. 20th. Sundridge, a juv. found in a cattle yard on Nov. 25th died the next day (JGH, JMH).

S Barn Elms Res., a juv. on Apr. 24th (mo), one on May 1st (JMS) and June 24th; two, including one juv., on Nov. 24th (PEF). Molesey Res. group, two on Dec. 12th and 19th and one or two on 27th (CO).

30 Heron

- E Walthamstow Res., 41 nests (JF, AG).
- M Kempton Park, 12 nests apparently in use on Mar. 9th (AF). Largest number of birds reported elsewhere was 20 at Queen Mary Res. on Aug. 15th (SEC). Inner London: usually one or two to be seen in Battersea and Regent's Parks (max. 4) and occasional flight records elsewhere.
- K Clement Street, small numbers (up to seven) roosting on arable land in latter part of the year and flying to feeding area in the evening (RVW). Sevenoaks, often seen, max. 7 on Aug. 14th (JGH, JMH).
- S Gatton Park, six occupied nests on Apr. 29th (HB). Bookham Common, three juveniles in long grass on July 17th. Thorpe G.Ps., three adults and two juvs. "catching rats" on rubbish tip on May 30th (GHG).

Ruddy Duck

- M Staines Res., a duck from Feb. 7th to Mar. 6th (DMP).
- S Island Barn Res., a duck on Jan. 23rd and 31st (DP). Walton Res., a duck on Jan. 10th and 17th (FJHt, CO) and from Sept. 25th to the end of the year (CO). These were all presumably escapes.

Mandarin

- M Osterley Park, a drake on May 14th may have escaped from collection at Southall (RAD). Southgate, a duck in Grovelands Park on Jan. 22nd and 24th (FJHt).
- K Lullingstone, a pair on Nov. 1st (RVW). Sevenoaks, a drake throughout Jan. (JGH, JMH).
- S Addlestone, three drakes and a duck on R. Bourne on Feb. 2nd (GHG). Mole valley, three pairs at Mickleham on Feb. 28th (TLB) and two pairs on Apr. 18th (PMD). Seven flew up valley at Leatherhead on Oct. 16th (GHG). Oxshott, three at Littleheath Pond on June 13th (IRB). Painshill Park, two drakes on May 1st and nest with eight eggs 18 feet up in an alder (WRI).

45 Mallard

The chief feature of the Mallard population in the winter of 1965-66 was the unusually early departure, and by mid-February about two-fifths had already left the waters included in the wildfowl counts. As the winter average is calculated by custom from the counts in November to February inclusive, the inclusion of the February figure this time lowers the average considerably, resulting in a drop of 13% on the previous winter's figures when no count for February was available. A more fair comparison, therefore, is to average the November-January counts only as in 1964-65 and the result then is a drop of 5%. The highest count in 1964-65

given previously as 5,121 should be amended to 5,014, comparing with 4,964 in the winter now under discussion. There were no concentrations of over a thousand Mallard on any of the reservoirs.

46 Teal

The high numbers of Teal noted in the previous four winters, during which the average for the winter wildfowl counts has varied from 814 to 887, was maintained in 1965-66 when the average reached 972, the highest yet. The largest monthly count, of 1,465 in December, was also a record. Unlike the previous species Teal did not apparently disperse so unusually early.

Details of spring or summer records of interest and of all flocks over 300 follow:—

- E Fisher's Green, a nest with three eggs was found after the breeding season (JCE).
- M King George VI Res., 430 on Jan. 17th, 350 on the 14th, 500 on 30th, an estimate of 900 on Dec. 12th and 700 on the 19th (MJR).
- K Belvedere S.F., a pair on June 4th (rvw) may be connected with a party of nine, possibly all juveniles, at Greenwich Park on July 14th (PJG).
- S Silvermere, a drake on May 30th (GHG). Barn Elms Res., 315 on Jan. 17th and c. 300 on the 24th, and 300+ on Mar. 6th.

47 Garganey

- E Fisher's Green G.P., a drake on May 30th (JCE). King George V Res., a pair on Apr. 10th (PJV).
- H Maple Cross and West Hyde, from one to four on various dates from July 10th (possibly 4th) to Aug. 17th (mo). Old Parkbury, two adults on Aug. 13th (ASK).
- M Brent Res., a duck on July 31st (LAB). Queen Mary Res., two on July 14th (BEC) and one to three between Aug. 9th and 29th (sgd, MJR). Staines Res., one on Sept. 1st (MJR).
- K Darenth, a pair on May 29th (H & jff).
- S Ham Moor G.P., a drake on May 8th (GHG).

49 Gadwall

- E Nazeing Meads G.P., two drakes on Mar. 3rd (BSMs) and one on Oct. 24th (JCE).
- H Lea Valley, up to four on various dates from early Jan. to Mar. 28th (PRJA, RMRG). Old Parkbury, one on Oct. 9th (EHW, LKW). Radlett, one at Frogmore on Sept. 4th (JDM).
- M Brent Res., a drake on July 24th (MC), one on Aug. 25th, three on Sept. 22nd and five on 25th, 10 from Oct. 2nd-9th, 14 on 21st and 28th, and four Nov. 4th-7th (LAB). It is noteworthy that up to nine stayed for about five weeks in the autumn of 1964. Canon's Park, two on Mar. 14th and one on Dec. 12th and 26th (EHW).

Kempton Res., a duck on Nov. 27th (AJC). Staines Res., two on Dec. 26th (MJR).

Inner London: Regent's Park, one on Aug. 8th (DIMW).

K Sevenoaks, a duck on Mar. 5th; six liberated on July 29th and 16 in August, all carrying W.A.G.B.I. rings. One of these, a first-winter drake liberated on July 29th, was shot near La Rochelle, S.W. France, on Oct. 15th. Sundridge, up to eight in November were probably some of the liberated birds (JGH, JMH).

S Barn Elms Res., maxima at the two ends of the year were 26 on Jan. 17th (PRM) and 28 on Nov. 19th (PEF). The only records there for May and June refer to up to nine birds. More information on breeding and success would be welcome. Penn Ponds, two pairs from Oct. 16th to 27th (mo) and seven on Nov. 5th (IGJ).

50 Wigeon

The wildfowl counts showed slightly higher numbers than of late with an average of 167, but they are still well below the level of the years 1954-55 to 1956-57 and 1960-61 to 1962-63. A count of 253 in January, 1966, was however the highest since February, 1963.

The following notes are restricted to unusual dates and localities:—

H Broxbourne G.Ps., 12 on Jan. 30th (PRJA).

M Inner London: Regent's Park, a duck and two juveniles on July 31st (AFM) and one on Aug. 22nd (DIMW).

K Greenwich Park, 18 on Mar. 20th (JAM).

S Barn Elms Res., a drake on July 17th (RHK).

52 Pintail

H Hilfield Park Res., a pair on four dates between Jan. 24th and Mar. 16th (BLS, EHW).

M Harefield Moor G.P., a drake on Mar. 6th (IGJ). Queen Mary Res., one on Jan. 24th (MJR), a pair on Feb. 7th and Nov. 14th (PJO). King George VI and Staines Res., one on various dates from Jan. 1st to Mar. 14th but two drakes on Jan. 23rd; one on six dates from Nov. 3rd to Dec. 3rd (mo).

K Dartford marshes, a drake on Feb. 21st (AW). Sevenoaks, a drake on Oct. 22nd (JGH, JMH).

S Island Barn Res., a drake from Jan. 3rd to Feb. 14th (DP). Queen Elizabeth II Res., one on Jan. 17th (WRI, JdeRK, PBL).

53 Shoveler

There is little change over the years in the numbers of Shoveler wintering in the Area, the highest number on the latest wildfowl counts being 101, compared with 91 in the previous winter. Like Mallard the few wintering Shoveler mostly left early.

In early 1965 the largest flocks consisted of 50 at Staines on Jan. 2nd, 17 at Girling Res. on Jan. 3rd, 40 at King George VI Res., on

Feb. 20th and 45 at Queen Mary Res. on Mar. 6th. In the months of May-July the only records were of a drake at Hilfield Park Res. on May 2nd, a pair at Barn Elms on June 13th of which drake was seen until the 19th, and one at Queen Mary Res. and Sevenoaks in July. The usual small parties were seen on autumn migration, the most notable being 30 at Rainham on Aug. 7th, 11 at Rye Meads on Sept. 30th and 22 on Oct. 2nd. At the end of the year there were peaks of about 60 at Queen Elizabeth II Res. on Nov. 14th, about 65 at Queen Mary Res. on Dec. 19th and up to 40 at Staines in Dec.

Inner London: Battersea Park, a drake from Apr. 11th to June 26th was probably the same as one seen about Vauxhall and Chelsea Bridges on Apr. 25th (MCLC). Regent's Park, a duck on July 31st (AFM).

54 Red-crested Pochard

Compare *L.B.R.*, 29: 18-19.

- H Hilfield Park Res., a drake on Dec. 11th (FCK, RK, SG). Rye Meads, two very tame on Aug. 8th (RMRG).
S Barn Elms Res., a drake from Jan. 24th to Feb. 16th (mo).

55 Scaup

- E King George V Res., one on Jan. 2nd and four on Oct. 9th (JCE, JF). Walthamstow Res., one on Jan. 28th (RSTJ), six on Oct. 7th (JF) of which two stayed until the end of the year.
M Brent Res., a duck on Nov. 13th (LAB). King George VI Res., one on Sept. 17th (CMV). Staines Res., several records of a drake and a duck in the first three months (mo).
K Ruxley, a duck from Sept. 15th to Oct. 6th (PDG, FJH).
S Barn Elms Res., there had been two ducks at the end of 1964. On Jan. 3rd three birds included two sub-adult drakes, and up to five were seen until Mar. 28th, one staying on to Apr. 1st (mo); a duck from Dec. 17th to 23rd (PEF). Island Barn Res., a drake on Apr. 4th (DP). Richmond Park, a drake on Mar. 15th (NTP).

56 Tufted Duck

As already noted (*L.B.R.*, 29:19) the average numbers of this species were very low in the winter of 1964-65. There was, however, a big movement in early March, when at Staines there were 200 on the 5th, 1,500 on the 7th but only 600 on the 9th (MJR). Apart from this, the largest flock was 950 at Barn Elms Res. on Jan. 17th. In the winter of 1965-66 there was a big recovery, but an early departure. If the February total on the wildfowl counts is included as usual when calculating the average this becomes 3,617, but if we ignore February the average becomes 4,167 which would be the second highest on record, only having been surpassed in 1962-63 when the hard weather was not only extreme, but persisted for an

unusually long time. The highest count in January, 1966, of 4,998 has also only been exceeded once, apart from the winter of 1962-63 when there were counts of 6,632 and 6,535. The chief elements of this large count in January, 1966, were 1,035 at Staines and 2,003 at Barn Elms.

Breeding records or ones strongly suggestive of breeding include:—

- E Ilford, one pair reared six young at Valentine's Park. Nazeing G.Ps., five pairs but only two broods seen. Walthamstow Res., three pairs reared 17 young.
- H Rye Meads, 35 pairs and eight other drakes; 18 broods on July 22nd.
- M Hampstead Heath, one pair bred unsuccessfully. Hurlingham Club, two broods totalling five young on July 24th. Northwich Park, one pair reared two young. Inner London: Hyde Park and Kensington Gardens, three pairs in June of which at least one bred. St. James's Park, seven broods totalling 33 ducklings on Aug. 2nd and one more brood of two newly-hatched ducklings on the 27th.
- K Chevening Park, one brood of seven. Danson Park, a pair on May 27th. Lullingstone, a brood of seven on Sept. 22nd. Ruxley, two pairs bred. Sevenoaks and Sundridge, present in breeding season. Sutton and Darenth area, at least 14 pairs and six drakes on May 30th. Westerham, a pair at Dunsdale on May 28th and three pairs at Squerreys Court on May 4th. Inner London: Battersea Park, three pairs in summer and breeding attempted as in 1964.
- S Barn Elms Res., seven-eight broods. Clapham Common, two pairs bred. Esher, a duck with nine young at Black Pond on July 4th. Godstone Town Pond, a pair on May 11th. Painshill Park, two pairs on May 1st and two drakes on June 5th. Ravensbury Park, a brood of five on Aug. 14th. Thorpe G.Ps., pair with two young on Aug. 22nd. Walton Res., two pairs reared nine young.

57 Pochard

In 1963-64 numbers of Pochard like those of Tufted Duck had been at a low ebb, but in 1964-65 there was similarly again a marked recovery and the November-February counts averaged 1,479. Just as with Mallard and Tufted Duck the departure was early, and if the February count is excluded from the average this becomes 1,835, which would be the highest yet. The January count of 3,165 is also a record, the previous highest having been 2,814 three years earlier.

- M Staines Res., a big movement on Mar. 7th already mentioned under Tufted Duck was equally marked for Pochard. There were 100 on Mar. 5th, 500 on the 7th falling to 300 on the 9th. In the winter 1965-66 the large numbers did not come in until Jan., but there were peaks of 290 at Queen Mary Res. on Nov. 14th and 330 at Staines on Dec. 19th. Inner London: Hyde Park and Kensington Gardens, a pair in May and June. St. James's Park, seven pairs and eight odd drakes on June 4th and two broods seen later.

K Single birds seen at several localities in May and June but no evidence of breeding.

S Barn Elms Res., although there were not many on wildfowl count dates there were *c.* 600 on Jan. 24th and 500+ on Feb. 5th. In December there were 440 on the 12th.

58 Ferruginous Duck

M Brent Res., a drake on Nov. 5th (LAB). Staines Res., a drake on Jan. 2nd-3rd (PC, DGH, MJR) had been present on King George VI Res. at the end of 1964 (see *L.B.R.* no 29 for 1964).

60 Goldeneye

The improvement in numbers in recent winters was again in evidence in 1965-66 with a peak wildfowl count of 90.

In the early part of the year there were maxima of 16 at the Lea valley reservoirs, 40 at Staines during the spring passage on Mar. 12th and also 31 in January, 22 at Queen Mary Res. and 18 at Walton Res. The last seen were three at Staines on May 2nd. At the end of the year the highest numbers were 10 at King George VI Res. and 22 at Girling Res. on Dec. 12th and 21 at Walton Res. on Dec. 31st.

61 Long-tailed Duck

S Queen Elizabeth II Res., one, probably an adult female, on Dec. 12th (JdeRK, PBL) and 19th (DP).

64 Common Scoter

E King George V Res., two drakes on May 2nd (JCE, PJV). Walthamstow Res., a duck from Nov. 28th to Dec. 4th (JF, REH).
 M Staines Res., six on Jan. 18th (DGH), three on Mar. 30th (MJR), four on Apr. 23rd (DMP, MJR) and five-six on July 18th (RAD, DMP).
 S Barn Elms Res., a pair on Mar. 30th (AJB, PFB, LR, WR) and on Apr. 30th (AJB, PEF), and a duck on Oct. 9th (HJFn).

69 Red-breasted Merganser

E Lea Valley, a duck at Walthamstow Res. from Nov. 20th-27th (JF), a drake at King George V on Dec. 11th (JF) and at Girling Res. on 12th (JCE) and three drakes at Walthamstow Res. on Dec. 27th (RStJ).
 H Troy Mill, a duck on Nov. 27th (SEC). Rye Meads, a duck on Nov. 28th (PAMD).
 M Staines Res., three on Jan. 5th-6th (MJR).

70 Goosander

There was little or no improvement in the Goosander situation, the wildfowl count average being 92 and the peak 107.

E Walthamstow Res., the injured bird referred to in previous reports stayed throughout the year and has now been present for five years.

M King George VI and Staines Res., maximum in the early part of the year was 65 and in November-December 40. Queen Mary Res., maxima 25 and 23 respectively. Kempton Park, 25+ on Dec. 11th.

S Leatherhead, one very tame bird on Mill Pond on Dec. 28th was eating bread with the Mallard (TLB, FJHt). Walton Res., maxima 50 on Feb. 21st and 56 on Dec. 27th. At no other locality were more than six seen.

71 Smew

In the early part of the winter of 1965-66 numbers were even lower than in other recent years, though the March count of 108 was the highest monthly count since March, 1956.

The following notes include the largest parties at the main reservoirs and the only Inner London record:—

M Brent Res., 38 on Feb. 25th and 26 on Dec. 26th. Kempton Park Res., 12 on Feb. 28th and 21 on Dec. 18th of which 11 were drakes. Staines Res., 39 on Jan. 17th and 11 on Dec. 24th. Stoke Newington Res., 25 on Jan. 3rd and seven on Dec. 8th. Inner London: a red-head in St. James's Park from Jan. 14th-22nd (AFGW).

S Barn Elms Res., seven on Jan. 29th and eight on Dec. 4th. Molesey group of reservoirs, six on Jan. 21st and four in December.

73 Shelduck

Inland, the only January record was of four at Brent Res. on the 20th. In February, single birds were seen at Staines and Queen Mary Res. on the 11th and 28th respectively, and on the 24th two parties totalling 32 birds flew over Barn Elms and away to the N.E. In March there was one at Sevenoaks on the 2nd-3rd and at Rye Meads on the 21st, and two at Walthamstow Res. on the 19th. April produced only one, at Queen Mary Res. on the 21st-22nd. In May there were seven in the Lea valley on the 1st, two flying west at Sevenoaks on the 10th and two at Queen Mary Res. on the 18th of which one stayed until the 26th. The only record in June-July was of one in Richmond Park, probably the "resident" bird from the Barn Elms district, and there were no more until one at Brent Res. on Aug. 25th. At Barn Elms two were seen on Sept. 12th and thereafter three were about regularly for the rest of the year, with a fourth on Nov. 9th and Dec. 26th; one of these was probably the "resident". Towards the estuary there was a peak of about 600 on the Thames at Stone on Feb. 21st (AW) and much smaller numbers at other times. There was a pair at Littlebrook on May 14th and three pairs at Swanscombe on June 9th, with one brood of seven. Records from these areas are patchy but there were up to 59 in autumn at Rainham on Sept. 23rd and 120 at Swanscombe on Dec. 31st.

Grey Geese *sp.*

E Tilbury Dock, five flying towards Kent on Apr. 28th (AFM).

S Hersham S.F., one flying east on Jan. 2nd (DP).

75 Grey Lag-Goose

H Old Parkbury, six flying S.W. on Feb. 7th (EHW).

M Highgate, two on Apr. 25th (MT).

In view of the large number of this species now kept in collections, or introduced by the Wildfowlers Association, it is impossible to accept single birds or small parties as likely to be of wild origin. There are, for example, 26 at Sevenoaks where they have been introduced on a gravel pit.

76 White-fronted Goose

H Shenley, two flying south on Feb. 14th (EHW).

K Darenth, 37 flying north on Jan. 25th (RVW).

78 Pink-footed Goose

H Cheshunt, G.Ps., two flying north on Apr. 21st (PRJA).

82 Canada Goose

H Pynesfield G.P., one pair attempted to nest but eggs were taken (per SEC).

M Moorhall G.P., two pairs, one with brood of five (BPP). Southgate, a pinioned pair reared three young which left full-winged (RFS). Inner London: Hyde Park and Kensington Gardens, two pairs reared five young; peaks of 60 Jan. 7th-11th and 74 on Sept. 28th including a large party which came in from the east to roost; day counts varied from 13 to 25. Regent's Park, as a result of destruction of eggs by vandals, no young were reared; the highest count was 57. St. James's Park, three pairs bred successfully; highest count 76.

B Sunnymeads G.P., 22 including two broods on July 22nd (DGH).

K Sutton and Darenth pits, four pairs on May 30th, of which two had four goslings each (RJE).

S Holmethorpe G.P., one pair reared three young (DW). Painshill Park, one pair reared four young (WRI, DP). Inner London: Battersea Park, in 1964 two pairs reared seven young and in 1965 three pairs again had seven young; up to 26 birds on the lake (MCLC).

84 Mute Swan

Numbers on wildfowl count dates are given for comparison with previous years:—

	<i>Oct. 17</i>	<i>Nov. 14</i>	<i>Dec. 12</i>	<i>Jan. 16</i>	<i>Feb. 13/20</i>	<i>Mar. 13/20</i>
1965-66	174	137	154	167	216	240

Inner London: One pair bred successfully in Hyde Park, and nesting was started in Regent's Park where the eggs were destroyed by vandals, and in Battersea Park where the birds became aggressive and had to be moved after killing two Canada Geese.

85 Whooper Swan

M Brent Res., an immature on Nov. 7th (LAB).

86 Bewick's Swan

- E King George V Res., two adults and three immatures on Mar. 6th; the adults were later shot (JCE, PJV).
- M Brent Res., one adult and six immatures on Jan. 20th (JA). Hampstead Heath, seven adults flew over on Jan. 4th (MT).

91 Buzzard

- E/H Nazeing and Broxbourne area, one drifting S.E. over county boundary on Feb. 20th (BSMs).
- M Perry Oaks, one on Jan. 24th (IGT). Brent Res., one on Sept. 2nd (LAB).
- S Tulse Hill and Brockwell Park area, one circling very high and moving south on June 7th (SWMH).

93 Sparrow Hawk

Although for the second year running no breeding was reported, an increase in observations of the order of 50% over last year's total suggests that this raptor reached its lowest ebb last year. All records are given below including those for Essex and Kent where the species was apparently absent in 1964.

- E Epping Forest, one on Feb. 7th (DIMW). Great Warley, one on Feb. 14th (MJA). Harold Wood, one on Dec. 2nd (RBW).
- H Northaw Greatwood, one on Jan. 31st (MBC). Cuffley, one on Apr. 13th (JAH, ART).
- M Ruislip, one on Mar. 13th (MC) and one at Ruislip Common on Mar. 28th (BPP).
Inner London: City, one flying west in the St. Pauls' area on Jan. 25th (HJC). Regent's Park, one over playing fields on Mar. 24th (RCG).
- K Greenwich Park, one "taking a sparrow" on July 4th (JAM). Swanley, one on Sept. 9th (DFM). Otford, one on Oct. 2nd (HFG).
- S St. Georges Hill, Weybridge, two soaring together on Jan. 3rd and a male on Jan. 16th (GHG). Weybridge Heath, a male on Jan. 23rd (GHG). Esher Common, one on Apr. 4th (PJO). Tadworth Heath, one on Apr. 17th (KDE). Headley Heath, one on Apr. 21st, May 22nd and Sept. 8th (BEC, KDE). Woldingham, one on May 9th and Oct. 17th (AJH). Chertsey, one soaring over wooded country on May 30th (MC, GHG). Kew Gardens, one seen in conflict with Kestrel on June 26th (LAB). Epsom Common, one on Nov. 5th (IRB). Banks Common, a male on Nov. 14th (PJO). Bookham Common, a female on Dec. 6th (SG).

99 Marsh Harrier

- M Hampstead Heath, a male on Apr. 3rd (JA, AC, MT). Satisfactory detail received from all observers.

100 Hen Harrier

- S Epsom Common, one, a "ring-tail", flew off eastwards on Nov. 4th (IRB).

103 Osprey

- M Queen Mary Res., a juvenile first seen on Sept. 17th by MJR was subsequently watched by numerous observers until Oct. 3rd. Although it could not be proved, cmv had the impression that two birds were in the vicinity on Oct. 2nd and 3rd.
Inner London: Regent's Park, an adult at 10.45 hrs. circled the lake before making off S.W. on Sept. 19th (DIMW).
- K Ruxley, one on May 1st, circled and moved off south (JEB).

104 Hobby

- H Maple Cross, one on Aug. 4th (AEG).
- M Staines Res., Perry Oaks S.F. and Ashford G.P. areas, one on five dates from July 20th till Sept. 1st (JA, BEC, MJR).
- K Charts Edge, one on July 11th (RVW).
- S Headley Heath, one on May 19th (KDE). Chessington, one on June 17th (DP). Thorpe G.P., one on Sept. 2nd (FVB, PHC, ARL, CO).

107 Merlin

- M Broomfield Park, a female seen on Feb. 19th snatched a Starling from a chimney stack (FJL). Hampstead Heath, a male on Nov. 3rd (RWG). Inner London: Regent's Park, a female or first winter bird on Feb. 13th flying west past Primrose Hill (DIMW).

110 Kestrel

From the records received for 1965, this species is certainly widespread and breeding successfully. Although there is an increase of 50% in summer records, the almost complete lack of comment on population trends makes it difficult to assess any change in the bird's status in the area.

The breeding distribution is given below together with comments and other records of interest. Isolated records have been ignored except for Inner London.

- E The position was summarized by BSMs as follows: There were only definite breeding records from Weald Park and Chadwell Heath. Birds were seen in the breeding season at Tilbury Dock, Dagenham, Wanstead Park, the Lea Valley, Epping Forest, Chigwell, Grange Hill, Hainault Forest, Harold Wood, Weald Park, Chadwell Heath and Brentwood.
- H Only one definite breeding record, a pair with one young at Nyn Park on Aug. 7th (TJ). Pairs or odd birds were seen at Hilfield Park Res., Shenley, Croxley Green, Northaw, Cuffley, Cheshunt and Bayford.
- M Definite breeding records from Ken Wood (JA, ACC, KES), Bushey Park (WRI), Christchurch, Hampstead (KES) and Southgate (FJL). Other sites where pairs were probably breeding included Bentley Priory, Potters Bar, Stoke Newington Res., Wembley Park, Staines Res., Bushey Park, Strawberry Hill Golf Course, Finsbury Park,

Swiss Cottage, Perivale and Osterley Park (2 pairs). LAB reported eight at Queen Mary Res. on Oct. 10th.

- M/S Inner London: Langham Place, one pair bred successfully in ventilation shaft (SC, JT). Battersea Park, one pair attempted to nest in old crows' nest (MCLC). Other mid-summer records came from; Ladbrooke Grove, one flying around spire of church on July 29th (EPB), Earls Court, one during April, June and July (MB), Bloomsbury, one around tower of Senate House on June 11th and 24th (EHW), St. John's Wood, one over Lords Cricket Ground on June 18th (AJC) and Dolphin Square, one seen throughout the year (MCLC).
- B Only one summer record received, a single bird at Denham on July 25th (MC).
- K Pairs bred or were seen with flying young at Swanscombe, Charts Edge, Brasted Chart, Chevening Park, Great Whittons Wood, Woolwich Arsenal, Littlebrook and Bexley. Pairs were also reported in the breeding season at Hogtrough Hill, The Birches, Elmers End S.F., Sevenoaks and at a site one mile south of Sundridge. HFG reports "no further decline" in the Pollhill and Otford Mount areas.
- S Successful breeding reported from Norbury Park, Esher, Epsom Common, Ewell Court, Dulwich Common, Richmond Park (three pairs) and Beddington S.F. area (five pairs). Pairs probably bred also at or near the following: Barn Elms Res., Morden Hall Park, Worcester Park, Banstead, East Molesey, Kew Gardens, Sanderstead, Riddlesdown, Bookham Common, Horsham S.F. and Ashtead. During August and September, high numbers were reported at Beddington S.F. and Mitcham Common areas with maxima of thirteen on Aug. 14th (ADP) and *c* 12 on Sept. 2nd (JG). ADP considered the five known pairs breeding in area to be an underestimate.

115 Red-legged Partridge

Breeding distribution is given.

- E Nazeing, nine on Mar. 13th (BSMs), five on May 1st and two on June 5th (AEG, JAH). Lea Valley reservoirs, two to three pairs (JF). Chigwell, one or two in March and July (KN). Sewardstone G.P., two on May 2nd to 8th (PFB). Fairlop G.P., seen throughout year with max. of nine birds (no date) (ACP).
- H Cuffley and Northaw areas, at least seven pairs from April to June (TG, JAH, JG, JL).
- M Bushey Park, pair on Apr. 24th (EJC, WRI). Staines Moor, pair on Apr. 25th (EJC, WRI). Mill Hill, one on July 4th (EHW).
- K Horton Kirby, five pairs on Mar. 29th (RVW). Lullingstone Park, one pair on Apr. 2nd (RVW). Farningham Woods, two pairs on May 17th (RVW). Littlebrook, two nests destroyed by grass cutters, but adult with two young on Aug. 2nd (FJH). Northfleet Green, one on May 9th (PJSn). Ruxley, a pair on June 1st (RVW). Eynsford, two pairs on June 29th (RVW). Woolwich Arsenal, three pairs,

two with broods on July 6th (RVW). Sevenoaks, pair with five young on July 14th (JMH, JGH).

- S Wey Manor Farm, two pairs on Apr. 10th and pair with seven flying young on June 26th (GHG). Farthing Down, one on Apr. 3rd (AJH). Hersham, pair in May (GHG, WRI). Esher Common, present June and July (CRAC).

117 Quail

- E Chigwell, one seen May 13th (BHT).
- K For the second year running this species returned to the valley of the River Darent. All records given are of birds heard calling by RVW. Lullingstone Park, one on June 11th. Knatts Valley, one or two on June 13th. Romney Street, one on June 14th. Clement Street, one on June 15th to 28th, also two nearby on July 16th. Horton Kirby, one on July 5th. Eynsford, two on July 16th. Dean Bottom, one or two from July 21st to Aug. 16th.
- S North Downs, one calling on three dates in June near Chelsham Court (HEP).

120 Water Rail

- E Fishers Green, one on Apr. 12th (BSMs). Hainault Forest, one Mar. 25th and Apr. 5th (KN).
- H Records of up to three in the winter months at Frogmore, Nyn Park, Rye Meads, Broxbourne and Maple Cross. At Cassiobury Park up to five birds from January to March, and singles occurred in the last three months of the year (JPH).
- M Highgate Ponds, singles on many dates from January to March and again in November and December (JA, MT, EHW). Ruislip, one or two in January and February and singles up to Apr. 11th (BPP). Beneath electricity pylons beside Staines Res. DMP found a bird freshly dead on Mar. 28th.
- K Reported only from Ruxley, singles in January, March, November and December (FJH, GFAM, LMS), but two on Dec. 7th (RVW).
- S Singles at Godstone Town Pond and Barn Elms Res. at both ends of the year (mo). Hersham S.F. one on three dates in January and February (DP). Ewell Court, one on three dates in March and again on Aug. 17th (KDE). Littleheath Common Pond, two on Aug. 3rd (IRB).

121 Spotted Crake

- H Cassiobury Park, four on Jan. 4th and two the following day (JRB). Singles on Jan. 21st, 28th 30th and Mar. 4th (LL-E, TL-E, JRB).

131 Oystercatcher

- E Girling Res., one on Mar. 21st (JF).
- H Broxbourne Pits, one on Feb. 28th (BLS). Rye Meads, two on July 24th (RMRG).

- M Queen Mary Res., three on May 20th and one on Aug. 12th and 28th (MJR). Brent Res., one flying S.W. on July 31st (LAB). Staines Res., one on Aug. 17th (MJR). King George VI Res., one on Aug. 30th (CMV). Perry Oaks S.F. one on Sept. 4th and 5th (MJR). Mill Hill, one flew over calling before dawn on Dec. 10th (EHW).
- S Barn Elms Res., one on June 3rd (PEF).

133 Lapwing

The only winter movements in the area in the first two months of the year were small parties over three localities totalling about fifty birds moving S. or S.W. on Jan. 2nd and 3rd, and a flock of thirty-six moving over Southgate on Jan. 26th. The largest flocks on the ground during this period were 300 at Elmers End S.F. and 400 at Sevenoaks.

Early March saw the beginning of a build-up in numbers at Sevenoaks to a maximum of 800 on the 4th. On that day at Danson Park, rvw saw 70 flying S.W. in two hours and three days later at Morden mjcd recorded a similar event with 123 in four flocks. However from Mar. 9th to 14th migrants were noted in small numbers moving in the expected direction N.E. over some six localities.

Mid-summer westerly movements began on June 10th and continued till Aug. 18th. Though flocks were usually small daily totals of birds passing were higher than in recent years and particularly in Kent from July 16th to 19th. rvw reported a strong passage all day on July 16th between Dartford and Shoreham and counted 1,040 in three hours over Clement Street.

One movement noted towards the end of the year began on Nov. 24th, lasted seven days and included the following; Rye Meads, a steady movement W. at *c* 400 per hour on the morning of the 28th dropped to less than half by evening (RMRG); the same day at Brent Res. *c* 150 flew S.W. as did *c* 300 at Potters Bar and 64 at Barn Elms Res. The late part of December saw 750-1,000 in fields in the Sundridge and Chevening areas on the 19th and a total of *c* 700 flying W. over four localities between Dec. 19th and 27th.

134 Ringed Plover

Spring passage was little in evidence this year, and the largest party reported was only ten at Swanscombe on June 9th. On June 27th one appeared in Regent's Park (DIMW), and three at Perry Oaks S.F. the same day (jms).

Two pairs had non-flying young at Swanscombe on June 9th and a nest with four eggs was found at Belvedere S.F. on the 17th (rvw). The maximum autumn flock of *c* 200 occurred at Rainham Marsh on Aug. 13th, one day earlier than last year. The largest party away from the River Thames was 30 at Perry Oak S.F. on Sept. 9th (sg).

135 Little Ringed Plover

Of a possible 36 pairs at 26 localities in the breeding season, 33 pairs bred or attempted to do so.

- E Nine pairs bred at six sites with at least seven young reaching the flying stage. One pair bred successfully on clinker amongst old car bodies (JCE, DGH, BSMs, KN, ACP).
- H Probably ten pairs bred at six sites; young of six pairs at least reached the flying stage (mo).
- M Four of a possible five pairs bred at four sites; only one pair successfully rearing three young (mo).
- K Nine pairs at eight sites; seven pairs bred rearing at least thirteen young (mo).
- S Three pairs at two sites bred rearing a minimum of two young (GHG, CO, DP, DW).

139 Grey Plover

- E Rainham Marsh, one on Aug. 13th (RT).
- M Staines Res., one on May 11th and 12th; Queen Mary Res., one on May 12th and 13th (DMP, MJR).

140 Golden Plover

All records are given.

- E Fairlop, 45 on Jan. 24th (DELW). Doddinghurst, 32 flying N. on Nov. 13th (JTS). Roding Valley at Abridge, *c* 150 on Nov. 30th (JCE). North Ockenden, 12 on Dec. 6th (MJA).
- H Broxbourne Pits, 20 flying N. on Jan. 1st (PRJA). Shenleybury, up to 70 in January and February and up to 80 in November and December (EHW, LKW). Rye Meads, 17 flying S. on Nov. 7th and four flying N. on the 13th (RMRG).
- M Staines Moor, *c* 250 on Jan. 23rd; 170 on Feb. 20th; *c* 100 on Mar. 5th and *c* 200 on Dec. 24th (RWB, MC, AF). Queen Mary Res., three on Nov. 6th (HJF). Perry Oaks S.F., two on Nov. 28th (CMV).
- K Stone, three on Feb. 21st (AW). Otford, one on Nov. 17th (JMH, JGH). Fawkham, two flying S.W. on Nov. 30th (DFM).
- S Walton Res., one flying N. on Mar. 6th (CO). Morden, fifteen flying S. on Mar. 7th (MJcd). Barn Elms Res., three flew N.W. on Nov. 7th (JG).

143 Turnstone

- E Rainham Marsh, one to four on six dates between July 24th and Sept. 1st (mo).
- M Staines Res., two on Apr. 30th (MJR); one on May 15th (DMP); five on Sept. 11th and two on Sept. 14th (BPP, MJR). Queen Mary Res., up to three from May 10th to 15th and one on May 25th; one on July 24th and three on Aug. 12th (MC, MJR). Perry Oaks S.F., up to four from Sept. 3rd to 13th (GCG, PJO, DMP, MJR, MJW). King George VI Res., one on Sept. 12th (DMP).

- K Sevenoaks, two on May 1st and one on 9th (JMH, JGH).
 S Barn Elms Res., one on Apr. 28th, May 2nd and June 1st (HMC, PEF, PRM, FCR, PJS); four on Aug. 11th (BAM, LR, WR).

145 Snipe

One pair bred at each of two localities, at least one pair successfully. Two Inner London records and all flocks of one hundred or more are given below.

- M Inner London; Regent's Park, one on Sept. 5th and Oct. 10th (RCG).
 K Elmers End S.F., *c* 150 on Jan. 3rd; *c* 100 on Mar. 7th (TK, PM, AJW).
 S Beddington S.F., *c* 300 on Jan. 24th and Mar. 10th; *c* 220 on Apr. 10th (MSA, PC, MJCd).

147 Jack Snipe

- E Romford S.F., up to four from January to March, but mostly early January and late March (RRS). Waltham Abbey Marsh, two on Apr. 4th (JCE).
 H Rye Meads S.F., one on four dates in February and March (RMRG). Cassiobury Park, three on Feb. 7th and singles on Mar. 6th and Dec. 26th (JRB, HCD).
 M Singles at Brent Res., Perry Oaks S.F., Springwell G.P. and Savehay G.P. in January and November (LAB, PC, IGJ).
 K One to two at Ruxley, Sevenoaks and Sundridge but up to seven at Elmers End S.F. during the winter months (mo).
 S Up to five in the winter months at Hersham S.F., Holmethorpe G.P., Ewell and Beddington S.F. but twelve at Worcester Park S.F. on Jan. 24th (MJCd) and nine at Beddington S.F. on Mar. 14th (KDGm).

148 Woodcock

Breeding season and Inner London records are given.

- E Bow Creek Wharf, one on May 21st was seen to fly along the River towards Canning Town Bridge (JTS). Warley, three roding on May 10th and no less than nine roding on June 14th (MSF, APS).
 H Broad Riding Wood, two on June 8th (MPI, BLS). Dane Mead, one on June 21st (GTH). Northaw Greatwood, one during May and June and two on Aug. 27th (MBC, JJ).
 M Inner London: Regent's Park, one on Feb. 20th, Mar. 4th, 5th and 7th (DIMW).
 S Esher Common, one roding from May to July (MC, CRAC, PJO). Bookham Common, one roding on June 19th and two on 28th (GB, PJO). Richmond Park, roding in two localities during July (DB).

150 Curlew

Records mainly of single birds were received for every month, except June and October. Only on three occasions, at Rainham and the Staines area in the autumn, did numbers just reach double figures and of the total of thirty-five sightings only four were in the area south of the Thames.

A single bird on Aug. 16th in Regent's Park provided the only record for Inner London (DIMW).

151 Whimbrel

- E Walthamstow Res., one on May 8th (JF). Nazeing Meads G.P., five on Sept. 25th (PRJA).
- H Rye Meads, one on May 1st (AC). Broxbourne Pits, fifteen flying N. on May 4th, one on May 8th and Aug. 6th (PRJA). Maple Cross, one on July 25th (HCD). Aldenham Res., one on Aug. 28th (EHW). Shenleybury, one on Nov. 14th (EHW).
- M Queen Mary Res., one on Apr. 30th (BEC). Staines Res., one on Apr. 30th, two on July 27th and one on Aug. 15th (MJR, BEC, DMP). Perry Oak S.F., two on Apr. 29th, one on Apr. 30th and two on May 1st (BEC, GCG, DMP).
- K Sevenoaks, one flying E. on May 1st and one on July 10th (JMH, JGH). Hogtrough Hill, one flying S.W. on July 25th (RVW).
- S Sanderstead, heard passing over at 01.00 hrs. on July 18th (AJH). Hersham S.F., one flying S.W. on July 31st (CO, DP).

154 Black-tailed Godwit

- H Maple Cross, four flying N. on July 15th (IGJ).

155 Bar-tailed Godwit

- M Staines Res., nine flying S.E. on Apr. 30th (DMP, MJR). Brent Res., one on May 1st (LAB).
- K Sevenoaks, one on Apr. 17th (JMH, JGH). Elmers End S.F., eight flying S. on Dec. 28th (KG, RR).

156 Green Sandpiper

Recorded every month of the year but most frequently on the autumn passage. The maximum was seven at various localities on six dates between July 16th and Sept. 18th. Winter records, mainly of single birds, were received from the Lea Valley, Rainham Marshes, West Hyde, Old Parkbury, Cassiobury Park, Maple Cross, River Colne, Rush Green G.P., Sevenoaks, Littlebrook and the Dartford Marshes. One giving a full flight call in Regent's Park on May 22nd was the only record for Inner London (RCG, DIMW).

157 Wood Sandpiper

All records are given.

- E Rainham Marsh, one on Aug. 9th (RT, JW). Nazeing Meads G.P., one on Aug. 29th (PRJA).
- H Broxbourne Pits, one on May 14th (PRJA). Near Cuffley, one on six dates from July 27th to Aug. 29th (TJ, JJ). Old Parkbury, two on Aug. 1st (ASK); one on Sept. 4th (ASK, EHW). Maple Cross, one or two between July 18th and Aug. 2nd (mo).

- M Perry Oak S.F., two from July 18th to 20th and three on 21st and 22nd (DMP, MJR); one on Aug. 22nd (MC, SEC); one from Sept. 4th to 8th and two from the 9th to 11th (SG, DGH, PJO, MJR, MJW).
- K Sevenoaks, one on July 19th (JMH, JGH). Swanscombe, one on July 21st (RVW).
- S Hershams S.F., one on May 22nd (CO, DP). Beddington S.F., one on Aug. 26th (KDE).

159 Common Sandpiper

Winter records came from two localities in the early part of the year, namely Rye Meads, one on Jan. 14th and Feb. 13th (RMRG), and Old Parkbury, two on Feb. 14th and one from Mar. 14th to 29th (ASK, EHW). The main spring passage of never more than three together occurred between Apr. 11th and May 30th with late singletons in Essex and Surrey on June 4th.

Breeding was not established this year but two presumed pairs spent June and July at Hornchurch Chase (KB, DEH) and a pair were seen at West Hyde G.P. on June 20th (GHMB).

Although the first sign of the autumn migration came on June 27th at two reservoir localities, the main passage lasted from July 16th till the end of September. Thirty-three at Girling Res. on Aug. 7th and 40 at Rainham on Sept. 27th were the largest numbers reported. A single bird at Barn Elms Res. from Nov. 6th till 19th was the only record for the tail end of the year.

For Inner London, 1965 was a good year with at least 14 birds at six localities during the first fortnight of May and from Aug. 15th to Sept. 15th.

161 Redshank

During the winter months single birds at three localities, including one at Millbank (Inner London) on Feb. 10th, were the only inland records received. Flocks of 50 at Littlebrook and Stone in January and February were the largest reported from the Thames marshes. All breeding season records are given.

- E Rainham Marsh, five pairs probably bred (mo). Fishers Green, one pair bred (RSTJ, BSMs). Nazeing Meads G.P., one or two during May and June (BSMs).
- H Rye Meads, one pair bred (JDM). Cheshunt Pits, one pair bred (PRJA).
- M Perry Oaks S.F., up to seven from March to May but did not breed (PC, GCG, MJR, JMS). Stanwellmoor G.P., one pair bred successfully (DGH).
- K Dartford Marshes, three pairs bred successfully (MR. HEMMINGS). Dunton and Sundridge area, one possibly two pairs bred (RVW). Swanscombe, three pairs present on June 9th (RVW). Belvedere S.F., two pairs present on June 4th (RVW).
- S Beddington S.F., four pairs holding territory during April (RFP); behaviour of two birds in July suggested the presence of eggs or young (ADP). Thorpe G.P., two on May 30th (GHG).

162 Spotted Redshank

- E Rainham Marsh, two on Aug. 31st (DB).
 H Maple Cross, one on Aug. 22nd and Sept. 4th (HCD, IGJ).
 M Perry Oaks S.F., one on Apr. 24th (DGH); two on Sept. 8th (MJR), three on Sept. 9th (MJW) and one on Sept. 11th and 12th (SEC, DMP). Queen Mary Res., one Aug. 18th and 27th and Sept. 9th (MJCd, MJR). Staines Res., two on Sept. 5th (MJR).
 S Beddington S.F., seven on Aug. 26th (KDE), six on Aug. 27th and 30th (RFP, ADP) falling to one on Sept. 6th (JG).

165 Greenshank

- Although once again scarce in spring (all records are given) the late June occurrence is unusual. More plentiful this year during the autumn passage with reports from at least eighteen localities, mostly north of the Thames, and mainly from Aug. 14th to Sept. 19th. Frequently reported in parties of up to six birds, but 14 together at Walthamstow Res. on Sept. 17th (RSIJ).
 M Queen Mary Res., one on May 11th and 15th (MJR). Staines Res., one on May 13th, 18th and 19th (MJR). Perry Oaks S.F., two on June 24th (MJW).
 K Sevenoaks, one on May 13th (JMH, JGH).
 S Barn Elms Res., one on Apr. 23rd (LR, WR).

169 Knot

- E Rainham Marsh, one on Aug. 23rd (KB).
 M Perry Oaks S.F., one on Apr. 10th (MJR).

171 Little Stint

- Recorded by the River Thames at the eastern boundary of our area for the fourth winter in succession.
 E Rainham Marsh, one on Aug. 8th, 13th, 23rd and Sept. 1st and two on Aug. 29th and Sept. 4th (mo). Girling Res., two on Sept. 5th (JCE).
 H Old Parkbury, one on Sept. 15th (ASK).
 M Queen Mary Res., one on June 3rd, Aug. 12th and Sept. 9th (MJCd, MJR). Staines Res., one on Sept. 14th (JG). Perry Oaks S.F., one on June 5th (DMP), one on Aug. 30th (JMS), nine on Sept. 4th and 5th, five on Sept. 9th dropping to one on Sept. 16th (mo), four on Oct. 2nd (HJF) and two on Oct. 17th (PJO).
 K Swanscombe, one on Jan. 21st (RVW). Sevenoaks, one on July 19th (JMH, JGH).
 S Beddington S.F., two from Sept. 2nd to 7th (JG, KDGM, ADP). Barn Elms Res., one on Oct. 12th (PEF).

173 Temminck's Stint

- S Barn Elms Res., one on Sept. 5th and 7th (JG, BAM, LR, WR, PJSn).
 See photograph opposite.



TEMMINCK'S STINT

(*photographed by L. Roberts*)

178 Dunlin

Recorded every month of the year except June. The winter flocks reported from the Thames marshes were smaller than in recent years. Maximum numbers were at Swanscombe with *c* 200 on Jan. 29th and *c* 250 on Dec. 31st, Aveley Marshes, *c* 200 on Mar. 6th and Dartford Marshes, *c* 200 on Dec. 4th. Thirty at Sevenoaks on Mar. 18th was by far the largest group seen at any locality away from these marshes.

179 Curlew Sandpiper

- E Rainham Marsh, one on July 30th (KN) and again on Aug. 5th (JHB, PFB, KN).
 M Perry Oaks S.F., one from Sept. 4th to 6th (DMP, MJR, CAW), two on Sept. 14th (JG, BAM) and one on Sept. 23rd (MJR).

181 Sanderling

- E King George V Res., one on May 2nd (JCE) and Aug. 1st (JF). Nazeing G.P., one on July 24th and 27th (PRJA). Rainham Marsh two on Aug. 28th and 29th (DB, RT).
 M Perry Oaks S.F., five on May 10th and then up to three till May 15th; 11 appeared on May 18th with ten the following day and four on May 20th; singles were present on May 26th and June 9th (DMP, MJR).

184 Ruff

During the early part of the year small parties were present at four localities but in November and December Perry Oaks S.F., the favourite area, was the only locality where birds were seen. The maxima at this site were 17 in February and ten in November. Evidence of a spring movement came from seven localities and lasted till May 14th. After a mid-summer record of a single bird at Queen Mary Res. on June 30th the autumn migration lasted from July through to October with records from eight localities and maxima of 29 at Romford S.F. on Aug. 23rd and 28 at Perry Oaks S.F. on Sept. 4th.

199 Lesser Black-backed Gull

Recorded during every month, but clearly more evident and with much higher numbers in spring and autumn. Although details of the larger flocks are given below they must be unrepresentative of the numbers passing through the London area. Inner London; an occasional visitor throughout the year with up to three at a time in the Royal Parks.

- M Brent Res., *c* 400 on July 31st and *c* 250 on Nov. 13th (LAB). Staines Res., *c* 700 came in to roost at dusk on Sept. 14th (JG).
 S Barn Elms Res., 155 on Apr. 23rd (PJSn). Brooklands, 119 on July 23rd (co). Queen Elizabeth II Res., *c* 200 at dusk on Jan. 10th (DP).

198 Greater Black-backed Gull

Of the few reports received the following were the largest flocks:

- S Queen Elizabeth II Res., *c* 1,500 on Jan. 10th (DP). Walton Res., *c* 350 on Jan. 30th and *c* 750 on Dec. 11th (AJC).

200 Herring Gull

Although three pairs were present during the breeding season and seen carrying nest material in Regent's Park, no eggs or young were seen. A similar sequence of events occurred with one pair in St. James's Park, so the breeding successes of 1963/64 were not repeated. One bird in Regent's Park was seen to take a young Tufted Duck on July 11th.

Once again very few records were received. Two roosting flocks are given below.

- M Staines Res., *c* 2,500 on Feb. 19th (AJC).
S Queen Elizabeth II Res., *c* 2,500 on Jan. 10th (DP).

202 Glaucous Gull

- K Sevenoaks, one second-year bird on Nov. 25th and 30th (JMH, JGH).

207 Little Gull

- E Nazeing Meads G.P., one immature on July 23rd (PRJA). King George V Res., one immature on Sept. 28th (JF).
M Queen Mary Res., two immatures on Aug. 18th (MJCa) and again from Aug. 28th to Sept. 2nd (SG, MJR, AHW), three on the 9th (SG) then one on several dates up to the 25th (LAB, MJR, CMV). King George VI Res., a first summer bird on May 4th, and one with an adult on May 23rd (DMP, CMV, AFGW). Staines Res., a first summer bird on May 23rd and 24th (DMP, AFGW); up to two from Aug. 12th to 15th, one on 24th (MJR), up to six from Sept. 2nd to 5th (GCG, MJR, CMV), five on 12th (AHW), one on 19th and 25th (HJF, MJR) and one on Oct. 9th, 10th and 25th (LAB, PC, ACC, GCG, MJR), were all immatures.
K Sevenoaks, an adult on Sept. 26th (JMH, JGH).
S Barn Elms Res., an immature on Sept. 5th (JG, LR).

208 Black-headed Gull

With no reports of breeding from Perry Oaks S.F. and Maple Cross this year, nearly 25 years of continuous breeding in the London area comes to an end.

One found dead by WRI at Queen Elizabeth II Res. on Mar. 1st had been ringed as a chick at Grosser Russweiher, Eisenbach (Ober Pfalz), Germany on May 31st, 1964.

211 Kittiwake

- E Walthamstow Res., one on May 29th (JF).
M Staines Res., one adult on Jan. 2nd and Sept. 8th (DMP, MJR). King George VI Res., an adult on Feb. 6th (DMP).

- K Ruxley, an immature on Nov. 7th (FJH) and 23rd (GFAM).
 S Barn Elms Res., one adult on Jan. 3rd (MDK) and Apr. 23rd (AJB, LR).

212 Black Tern

The spring passage began on Apr. 30th with 28 birds at two localities and at least 92 the following day at four localities but dropped the next day (Sunday) to 14 individuals at three reservoir sites. Further passage was noted at Staines Res. during the mid-week period of May 11th to 13th with a maximum 17 on the 12th. Three birds at Staines Res. on May 23rd and singles on June 5th and 7th at Rye Meads and Staines Res. respectively, concluded the spring movement. Kent, with only two observations during the whole year, provided the largest spring flock with 33 at Ruxley G.P. on May 1st.

After an isolated mid-summer record of a singleton at Barn Elms on June 23rd (RWG) the return passage extended from July 18th to Oct. 2nd. However, observations were only frequent in the Staines area and only isolated records came from the other counties. Movement was particularly noticeable from Aug. 10th to 13th (maximum of 52 at two sites on the 10th) and on Sept. 4th and 5th (maximum of 30 at three sites on the 5th). On Sept. 24th at Staines Res., new arrivals during the day built up the numbers to 19, but all except one had gone the following day. Fourteen were present on Sept. 29th and the last bird of the season was seen on Oct. 2nd.

217/218 Common/Arctic Tern

Apart from single birds at Staines Res. and Rye Meads on Apr. 1st, the spring passage lasted from Apr. 22nd to June 5th. The maximum flocks recorded of 48 at Staines Res., 45 (identified as "Common", JMH, JGH) flying E. at Sevenoaks, 24 flying S.S.E. over Fulham and ten flying N.N.E. over Sanderstead were all on May 1st.

Noted in the autumn from July 24th until Oct. 10th, mostly in flocks under ten, but on Aug. 8th and 11th 12 were present at Staines Res. and on Sept. 25th a total of 25. By far the largest numbers seen were at Long Reach, Dartford, where PWB saw 120 fly upriver in one and a half hours on Aug. 28th and 58 the following day.

217 Common Tern

- E Nazeing Meads G.P., one or two on all visits from May to August, but did not breed (BSMs).
 H Broxbourne Pits, one pair from May 2nd and up to three pairs on some dates in June and July (PRJA). Rye Meads, one pair from May 9th to 23rd (RMRG).

222 Little Tern

- E Rainham, one on Aug. 13th (RT).

- M Staines Res., one on May 6th (MJR) and 9th (JMS), and three on June 15th (DMP); two on Aug. 14th (CMV). Stanwellmoor G.P., one on June 9th (DGH). Brent Res., one adult and two immatures on July 31st (LAB). Queen Mary Res., five on Aug. 12th (MJCa, MJR).
 S Barn Elms Res., one on June 18th (JMS).

223 Sandwich Tern

- E Nazeing Meads G.P., one on Aug. 28th (BSMs).
 H Rye Meads, 14 flying S. on May 1st (RMRG).
 M Staines Res., one on May 10th and three on the 12th (MJR). Wraysbury New Res., two on Sept. 26th (MJR).

227 Guillemot

- M Inner London: St. James's Park, an oiled bird on Dec. 22nd (sc).

232 Stock Dove

Breeding season records (April-August) and large flocks only are given.

- E Hainault Lodge, three pairs bred (ACP). Single pairs were present at Weald Park, Shenfield and Thorndon.
 H Whippendell Woods, two pairs bred (JRB). Cassiobury Park, one pair bred (JRB). Nyn Park, one pair present (TJ). One to three birds were present at West Hyde, Old Parkbury, Moor Hill, Cuffley and Bayford during the breeding season. Old Parkbury, 23 on Oct. 10th (BLS).
 M Hampton Court Park, three pairs located in the breeding season (WRI). Staines Moor, two pairs on Apr. 19th (DGH). Osterley Park, at least three pairs (DGH). King George VI Res., 30 on July 4th and 50 on July 18th (MC, DMP). Inner London: Regent's Park, one on Mar. 24th and July 27th (RCG, DIMW).
 B Iver, five on June 6th (PJSn).
 K Reported from Greenwich Park (four pairs), Keston, Brasted Chart, Horns Cross, Chevening Park (two singing), North Cray, Lullingstone (several pairs), Otford Downs (two singing), Swanscombe, Woolwich Arsenal (three pairs) and Downe. Sevenoaks, 50 on Jan. 27th (JMH, JGH). Swanscombe, 20 on Jan. 31st (PC).
 S Painshill Park, one flushed from 1964 nestsite on May 1st (WRI). Holmethorpe, one on June 19th (GJD). Barn Elms Res., one on May 13th and June 6th (PJSn). Worm's Heath, two on Apr. 18th (MSA). Walton Res., one on May 2nd and two in July (co). Beddington S.F., three on Apr. 17th and June 7th, six on July 11th (ADP). RHBf reports none seen in the Burgh Heath area for three years.

234 Wood Pigeon

Rather fewer records were received this year and no major movements were noted. Of the reports for January and February, the

following four were the largest; Elstree, *c* 1,000 flying S.W. on Jan. 2nd (EHW); Cockfosters, *c* 2,000 flying S.E. on Jan. 4th (RFS); Esher Common, 1,150 flying S.W. on Jan. 24th (PJO) and Southgate, *c* 2,500 flying N. on Feb. 21st (RHP). There were 2,000 at Copse Farm, Harrow Weald on Jan. 4th and 1,000 on the 25th. During November and December *c* 1,000 flying W. at dusk over Rye Meads on Nov. 27th (RMRG) and *c* 1,000 going S. over Broomfield Park on Dec. 11th (FJC) were the biggest flocks out of eleven observations.

In Dolphin Square, Inner London, a pair bred successfully, virtually at ground level. The nest was situated on a wooden shelf beneath a glass roof which was part of a frequently used underground car park. To reach the nest the birds flew up and down the ramp used by the vehicles.

235 **Turtle Dove**

Described as well distributed in rural Essex and was reported from thirteen localities in both Kent and Surrey. It would appear that observers in Herts. and Middlesex are reluctant to send in their records as no reports of breeding were received for these counties. The largest flock seen was of 130 feeding on arable ground at Farningham on June 11th (RVW). A late migrant was flushed from the ground at Woolwich Arsenal on Oct. 3rd (RVW). Inner London: migrants were reported during May in Regent's Park, with a maximum of at least nine on the 22nd, and again in smaller numbers during September (RCG).

Collared Dove

Twice as many reports of pairs breeding or possibly breeding as in 1964, but still no definite breeding record for Herts. and Kent. With the species so successful in Surrey it is surprising that Kent within the London Area can only claim some eight observations since its arrival in 1962.

- E Brentwood, a pair with nest and two young on May 29th (RBW). Leytonstone, six present on Apr. 20th and a bird on a nest in a Monkey Puzzle tree on Apr. 23rd (GJH). Shenfield and Hutton, up to 25 from January to April, four nests found and post breeding numbers reached a maximum of 50 (KB, APS, *et al*). Valentines Park, two arrived on May 14th, one bird wearing a Belgian ring, eventually nested in August, rearing one young (JM). One to three birds were reported from Belhus Park, Brook Street (between Brentwood and Harold Wood); Epping Forest, Upminster and Waltham Abbey during April, May and June.
- H Cuffley, one or two at several sites from February to September (JAH, JJ, TJ). Broxbourne, one on May 1st (JAH). Rye Meads, one on Oct. 14th (RMRG).
- M Ashford, one to three present from February to June (PGT). Staines, one on Mar. 5th (AF). Heston Church, up to five from January to July but no evidence of nesting (RAD). Lordship Park, one pair

- plus one male from May 2nd to end of August (AC, RKN). Sunbury on Thames, at least 2 pairs established (MJR). Mill Hill, one on Sept. 27th (EHW). Queen Mary Res., ten to twelve on Dec. 26th and 27th (PF, PJO). Two pairs at Cranford and one pair at Hounslow were present throughout the year (DGH). Inner London: Regent's Park, one on June 13th and two on Sept. 1st (RCG, DIMW). City, two flew over St. Paul's Cathedral at 05.30 hrs. on May 13th (RFP).
- K Greenwich Park, one pair on Mar. 29th (PJG). Kensing, one pair on Apr. 15th (JMH, JGH). Orpington, one or two for about a week from May 13th (ME).
- S Hook, 3 pairs present during breeding season; 2 nests built and one young flew (SG). During December SG described the species as "appearing in fresh localities almost daily" in the Hook and Chessington areas. Chessington Zoo, 15 on Aug. 25th, rising to *c* 50 on Dec. 31st were attracted by the good feeding to be had in the "chicken" section of the Zoo (SG). Sutton, up to three at various sites between station and Belmont Hospital (DJ). Coulsdon, one pair bred rearing one young (DVF). Nork Way, Banstead, always present, usually under ten, but at least 24 on Jan. 14th (EMF); three pairs at least during May (AVF), but breeding success possibly hampered by Carrion Crows (EMF). Walton on Thames, three birds in Sydney Road from Mar. 27th to Apr. 3rd, three pairs in Midway Road on May 30th and twelve birds on Oct. 9th (GHG). Reigate, seven on June 22nd and July 25th, but local residents say up to 20 in winter (JAF, DW). Purley, one pair from Mar. 15th (PMD).

237 Cuckoo

Analysis of records received suggest this species is widespread in May, but evidence of birds present in mid-summer is a little lacking, especially north of the Thames. From Essex, MJA reported "a good year" in the North Ockenden area and reports in June came from four localities in Middlesex. Although in Kent there was only one proved instance of breeding, birds were reported from eleven localities and RVW recorded that he had noted singing birds in 20 areas. Surrey provided records from 23 areas. Comments included "first for four years" from East Molesey in May (JdERK) and PRM suggested perhaps a very slight decline over 1964 on Wimbledon Common. The only record for Inner London was one flying over Archbishop's Park at 07.40 hrs. on Apr. 27th (GHG).

Although records of the "first" Cuckoo heard are still welcome reports of birds present in areas in late May and June would help greatly in establishing a more accurate picture of the breeding distribution.

241 Barn Owl

A slight increase in records received compared with recent years. All records are given.

- E Harold Wood, one on May 15th (RBW). Brentwood, one on several dates in May (JTS). Barking, one pair reared two young (KB). Hainault Lodge, one unmated bird present during breeding season (ACP). Doddinghurst, one on Sept. 12th (JTS).
- H Rye Meads, one on Mar. 6th and 13th and Oct. 9th and two on Apr. 22nd and Dec. 19th (RMRG). Cuffley and Northaw areas, four to five heard during an owl census (MBC, JAH, JJ). Harper Lane, Radlett, one on Oct. 5th (ASK). Old Parkbury, one on Oct. 9th (LKW). Near Essendon, one on Dec. 30th (BLS).
- M Ealing, one found dead on Feb. 23rd had probably been hit by a car (GB).
- K Knockholt, one on Jan. 13th (JMH, JGH). Woolwich Arsenal, one on June 22nd and 26th was seen to take small mammal into disused shed; one on Dec. 27th (RVW).
- S Hinchley Wood and Surbiton areas, one pair present throughout the year (CRAC, NTP). Tadworth Golf Course, one on Feb. 10th (KDE). Claremont, one on June 26th (IRB). Richmond Park, two from July 19th; "breeding hole" found (DB). Beddington S.F. one on July 15th was hunting at dusk (ADP). Bookham Common, one on Aug. 1st (GHG). Downside, one on Sept. 1st (GHG) and one at nearby Stoke D'Abernon on Nov. 6th (GB). Shirley, one calling from Nov. 14th to 23rd (RGB).

246 Little Owl

Recorded in the breeding season from several localities in Essex, seven in Middlesex, but only at three sites for the whole year in Herts. In Kent one or two birds were present from February to June at twelve localities and similar numbers during the breeding season at ten areas in Surrey.

247 Tawny Owl

Once again widely reported from all counties except Herts. where the species is probably neglected by observers as MBC, JAH and TJ noted 27-28 during an owl census on Mar. 28th. Only two observers, one in Middlesex and one in Surrey noted any decline and in both evidence was slight. Records for Inner London are slightly summarized. Holland Park, one pair bred successfully (EPB). Ladbrooke Square area, one seen or heard every month except May and June and in St. John's Gardens a juvenile was heard on Aug. 18th (EPB). Hyde Park, two in adjacent trees on Mar. 16th (EPB). Bloomsbury, one on Mar. 11th (EHW). Lincolns Inn Fields, one from January to March (EHW). Belgrave Square, one on Nov. 9th (GHG). Regent's Park, one pair present and a juvenile found dead in late May (RCG). Gloucester Road/Harrington Gardens, one on May 28th (DM).

252 Nightjar

Breeding season distribution is given.

- E Warley, one on June 9th and 23rd, two on June 14th (MSF, APS). Ongar Park Woods, one on May 14th and 15th, two males and one female on June 4th and a pair on July 2nd (SH, JTS, DELW).
- H Broad Riding Wood, three on June 8th (MPI, BLS). Dane Mead, one on June 21st (GTH).
- M Harrow Weald, one, or perhaps a pair, resident (EHW).
- B Black Park, none recorded this year (DGH).
- K Joyden's Wood, one on May 19th and 22nd, two on July 8th (PWB, VAG, FJH). Ide Hill and Bench Green area, one on May 22nd (HFG). Crockham Hill Common, one from June 14th to 19th (RVW). High Chart, one on June 19th (RVW).
- S Prince's Coverts, one pair present (KDE). Esher Common, one on May 16th, June 30th and July 2nd (CRAC, PJO). Limpsfield, up to four during June (AFC, AJH). St. George's Hill, two on Aug. 20th (GHG). Walton and Banstead Heaths and Tadworth, 13 pairs present (KDE).

255 Swift

Apart from a very early bird on Apr. 5th (KDE), the main passage started later than usual with small numbers at two localities on Apr. 29th. However during the next week many appeared at several localities and comments from observers for May 9th, included "thousands" at Staines Res. (RAD), "big influx" at Sevenoaks (JMH, JGH) and *c* 300 per hour flying N. from 08.00-10.30 hrs. on a 500 yd. front over Addlestone (GHG). No notable flocks or movements were reported on the autumn passage. During the 1st, 3rd and 4th weekends of September one or two birds were seen on eight occasions at six localities and suggests perhaps that odd birds were present throughout the month.

A bird ringed in May at Barn Elms Res. was recovered near Perpignan, France on Aug. 23rd (*B.T.O. News*). At Danson Park on May 28th and 29th, RVW counted no less than twelve killed by motor traffic while feeding low over a road during a N.E. wind.

256 Alpine Swift

H/M Between West Hyde and Harefield, one with hirundines over canal on Sept. 26th (ERG, JDM). Full details received and accepted by *British Birds* Rarities Committee. The first record for the London Area in this century.

258 Kingfisher

The recovery of this species (see *L.B.R.* for 1964) continues with an increase in breeding records and winter observations. In the latter months of the year birds were regularly reported in three localities. All breeding season records and one Inner London occurrence are given.

- E Navestock Park, one pair seen carrying food on several occasions during breeding season (REH). River Roding, between Chigwell and Abridge, two from Apr. 16th to 19th (JS).
- H Near Cuffley, one on June 20th (JJ). Nyn Park, one on July 31st (JPW).
- M Stanwellmoor G.P., one on Apr. 19th (DGH). Osterley, one on July 18th (DGH). Harefield Moor, one on July 25th (BPP).
- B Sunnymead G.P., two on July 22nd (DGH).
- K Sevenoaks, one pair present throughout breeding season; no young seen but in September, a juvenile killed itself by flying into a glass window (JMH, JGH). Brooklands Lake, Dartford, two in May were considered to be breeding nearby (Mr. Hemmings). Sundridge, one seen during May (JMH, JGH). Horton Kirby, one pair displaying on May 30th (RJE). Darenth G.P., one on May 13th (RVW). Eynsford, one pair bred (FJH). Stone, one on June 1st (Mr. Hemmings). Hall Place, Bexley, one on June 30th (FJH). Dinsdale, near French Street, one on June 16th, 23rd and 30th (RVW). Ruxley, one on July 24th (FJH).
- S R. Mole, Cobham, one pair bred (GHG). Godstone, one pair probably bred (MSA, AFC, AME, AJH). Painshill Park, one on May 1st and June 5th (WRI). Broadwater, Walton, one pair on May 7th (WRI). Thorpe G.P., recently used nest found on Aug. 22nd (WRI). Holmethorpe G.P., one on Apr. 3rd (DW). East Molesey, one on Apr. 13th and 14th (PJO). Mickleham, two on July 3rd (TB). Inner London: Lambeth, one flew over Lambeth Bridge on Jan. 21st (GHG).

261 Hoopoe

- K Sevenoaks, one on May 6th (JMH, JGH). Biggin Hill, one on May 16th (MH). Woolwich, one on Aug. 19th (AJW).
- S Richmond Park, one on Apr. 25th (RMC). Weybridge, one on May 4th (CJM-B).

262 Green Woodpecker

Reports were received from many localities for the whole year, but comments from three observers suggest a possible slight decline. RFS and LB at Potters Bar and Strawberry Hill, Twickenham respectively, noted a total absence of the species, where in previous years birds were present. At East Molesey, JÆRK during the Jan. to June period recorded it on only nine occasions (five in January) as against *c* 25 in the same period in 1964 and in Osterley Park DGH described it as "present from Sept. onwards". "Still increasing, but not yet recovered" was the comment from PRM on Wimbledon Common. The only record for Inner London was a male in Regent's Park on Sept. 9th (RCG).

263 Great Spotted Woodpecker

Although reports from observers varied the general consensus of

opinion was that this Woodpecker was the commonest of the three species. In the Hainault Lodge area, ACP found six pairs of this species against three pairs of Green Woodpecker and RGB reported it as "well up on Green" in the Croydon area. At Caterham, AFC records it as "quite numerous", PRM as "commonest and increasing on Wimbledon Common" and GB in a sample 40 acres of woodland found, for the fifth year running, two pairs resident in the breeding season. However in the Wallington area KDGM reports that since 1962 it is no longer resident and LB at Strawberry Hill, noted for the first time in seven years, its total absence. JdERK at East Molesey during the January to June period recorded it only five times against c. 24 in the same period in 1964.

A bird ringed by LWC at Sanderstead on Mar. 18th 1962 was still visiting the ringer's bird table up to December of the current year.

Inner London: Holland Park, one pair bred; a male remained in the park and was heard drumming on Dec. 29th (EPB). A juvenile was seen in Archbishop's Park on July 27th (GHG) and single birds were seen in October in St. James's Park and Hyde Park (GHG, RFS). In Regent's Park a bird was seen on Jan. 16th (EHW) and two were seen frequently in the latter half of the year (RCG).

264 Lesser Spotted Woodpecker

Reported from 45 localities. Breeding pairs or suspected breeding were recorded from Epping Forest, Warley, Harrow Weald Common, Stanmore Common, Hampstead Heath (3 pairs), Mill Hill (2 pairs), Hampton Court Park, Wimbledon Common and Ashted Forest. Singles were noted at 22 other localities in the breeding season.

At Kingston Vale on three dates in November, BAM saw a partial albino. The only normal coloured areas on the bird were the wings and beak. The rest was a dirty white, except for the black centre tail feathers and pink legs and feet.

265 Wryneck

Present in the breeding season at 15 localities, all south of the Thames, classified as follows:

Probably breeding	9
Possibly breeding	6

In addition there were records of 6 migrants in spring, 3 north and 3 south of the Thames, and of 2 migrants in autumn, one each north and south of the Thames.

271 Woodlark

One pair bred in Kent, and probably a second pair was present in the same district (RVW). All other records are given in full.

H Broxbourne pits, one on Feb. 27th (PRJA).

M Scratch Wood, one singing on May 1st, but did not stay (EHW).

S Beddington S.F., one on Aug. 29th (ADP).

272 Skylark

Breeding records received suggest that the recovery in numbers following the losses incurred in the 1962/63 winter continues.

Reports of movements were frequent only in the autumn, particularly in October, but the largest number counted was only 130 at Danson Park, Kent, on Oct. 10th (RVW). At the same locality, 150 were noted flying S.W. in small flocks on Mar. 4th during a short period of severe weather (RVW).

274 Swallow

The largest numbers reported were on Sept. 11th, during the autumn passage, when there were 250 at Hilfield Res., (BLS), and *c.* 1,000 Swallows and House Martins at Potters Bar, Middx. (JPW). Late migrants were seen in November at Potters Bar, two on the 3rd, Walton Res., Surrey, one on the 6th, and at Hampton Res., Middx., and Stone, Kent, single birds on the 14th (EPB, AJC, EMG, JTG, RFS).

275 House Martin

The largest numbers noted on the autumn passage N. of the Thames were *c.* 150 at Hilfield Res., on Sept. 11th (BLS), and *c.* 1,000 House Martins and Swallows at Potters Bar the same day. On Sept. 6th, S. of the Thames there were 400 at Itchingwood Common and 200 at Godstone Town Pond (RGB), and a large flock moving S.S.W. at Sanderstead (LWC). A late bird was seen at Stain Hill Res., Middx., on Nov. 14th (EPB, EMG).

277 Sand Martin

The largest numbers reported in the spring were *c.* 200 at Staines, Middx. on Apr. 11th (PJO), *c.* 500 at the Holmethorpe G.P. colony, Surrey, on May 15th (DW) and 500+ at Rye Meads, Herts., on May 29th and 30th (RMRG).

In autumn there were 500+ at Rye Meads on July 31st and Aug. 1st (RMRG), *c.* 500 at Staines on Aug. 15th (JMS) and *c.* 1,000 at Rye Meads on Aug. 24th (RMRG).

Much larger numbers were reported from a roost at Ashford G.P., Middx.; *c.* 3,000 on July 27th and *c.* 8,000 on Aug. 3rd (BEC). At another roost at Thorpe G.P., Surrey, where there were *c.* 400 on Aug. 30th and *c.* 800 on Sept. 5th and 12th, nine recoveries were made of birds ringed elsewhere, details of which are given below (GHG):

	<i>Date of recovery</i>	<i>Date ringed</i>	<i>Ringed at</i>	<i>Movement</i>
Adult	29.8.65	10.8.65	Ashford G.P., Middx. roost	3m.W.
Adult	4.9.65	5.8.65	Bessels Green, Sevenoaks, Kent. colony	30m.W.
Adult	5.9.65	13.6.65	Eweholme, Oxon. colony	27m.S.E.
Juvenile	5.9.65	19.7.65	Fairoaks, Eastleigh, Hants. colony	45m.N.E.

Juvenile	5.9.65	13.8.65	Wiggenhall, Kings Lynn, Norfolk. roost	95m.S.S.W.
Juvenile	5.9.65	15.8.65	Wiggenhall. roost	95m.S.S.W.
Juvenile	5.9.65	5.8.65	Rothley, Leics. colony	90m.S.S.E.
Juvenile	5.9.65	25.8.65	Fairburn, Castleford, Yorks. roost	165m.S.
Juvenile	12.9.65	3.7.65	Wittering, Northants.	80m.S.

278 Golden Oriole

- E Epping Forest, one heard unmistakably on several occasions at Warren Wood from May 30th to June 7th (DIMW).

281 Hooded Crow

- E Weald Park, one on Feb. 25th (MPT).
M Hampstead Heath, one on Mar. 13th (JA).
K Ruxley, one on Feb. 26th and 28th (FJH).

282 Rook

- M Inner London: Regent's Park, two on Mar. 16th, one on Mar. 25th and Apr. 6th; one on four dates in October (RCG).

283 Jackdaw

- M Inner London: Kensington Gardens, six, including one young very weak in flight, on June 10th; one or two on three dates in October (RFS).
Bloomsbury, one flying over, calling, on Oct. 6th (EHW).
S Inner London: Lambeth, two in Archbishop's Park on Oct. 11th (GHG).

284 Magpie

- M Inner London: Regent's Park, one on Oct. 30th (RCG).

286 Jay

Breeding season records for Inner London are given.

- M Holland Park, probably one pair bred; a juvenile being fed in July (EPB). Stanley Crescent Gardens, Notting Hill, a pair with two juveniles in July (EPB). Hyde Park and Kensington Gardens, two or three pairs present, but not seen in July (RFS). Old Brompton Road, a pair with three or four young in nest on ventilator at no. 222 in June (JT). Old Brompton cemetery, two pairs on Apr. 22nd (MCLC).
S Battersea Park, a pair collecting nesting material on Apr. 24th (MCLC).

293 Willow Tit

Breeding season distribution.

- E Weald Park, two pairs and one brood seen (MPT).

- M Brent Res., one pair bred; Scratch Wood area, three pairs at least bred; Ruislip, two pairs at least bred; Bentley Priory, one pair (EHW). Harefield, present at Bayhurst Wood (BPP).
- K Romney Street, a pair on Apr. 19th; The Birches, a pair on June 28th (RVW).
- S Banstead Heath, one pair bred unsuccessfully (ADP). Bookham Common, two on Apr. 11th and a family party on June 28th (GB, EMH, LM). Itchingwood Common, up to two throughout the year (RGB). Littleworth Common, a pair on Apr. 10th and May 9th (CRAC, NTP). Reigate Heath, two adults and 5 juveniles on June 7th (RHBF). Selsdon, one or two in April and May (KDGM, AJW). Tadworth, two singing males on Apr. 14th and 15th (HB). Warlingham, one on May 16th, and a family party on June 13th (IGM).

294 Long-tailed Tit

Continues to increase from the very low population level to which it was reduced by the 1962/63 winter. There was apparently an influx in the autumn. Two winter records for Inner London and a summary of the breeding distribution are given.

- E Bred successfully at Brentwood, Epping and Warley, and reported from several other localities during the breeding season.
- H The absence of records is more likely to be due to observers not submitting records than to the absence of Long-tailed Tits.
- M Reported in the breeding season from seven localities, and two family parties seen. Inner London: Bloomsbury, *c.* six in Brunswick and Mecklenberg Squares on Nov. 8th (EHW).
- K Seen in at least eight areas in the breeding season.
- S Reported from 12 localities in the breeding season, at seven of which nests or family parties were seen. Inner London: Lambeth, five flew over Archbishop's Park on Dec. 1st (GHG).

295 Bearded Tit

There was again an influx in the autumn, for the seventh year in succession.

- E Navestock Park, three trapped and ringed on Oct. 6th and two seen on Nov. 10th (DGH, TFP). Rainham, six (one male) on Jan. 31st and six (three males) on Mar. 7th (PRD, GAF).
- H Old Parkbury, two on Oct. 9th, five or six on Oct. 17th, 20th and 21st, and several on Nov. 7th (MG, MR, EHW). Rye Meads, three on Jan. 30th; present on a number of dates from Oct. 9th to Nov. 14th, the largest numbers being 11 on Oct. 9th, 12 on Oct. 23rd (two of which had been ringed at Walberswick, Suffolk), and seven on Nov. 14th (RMRG).
- M Brent Res., two on Oct. 25th and 26th (LAB).
- K Dartford Creek, four on Jan. 18th and Feb. 1st (FJH). Elmers End S.F., two on Oct. 16th (TK, PM).
- S Richmond Park, a male on Nov. 6th (PM, BPP).

296 Nuthatch

M Inner London: present in the breeding season at Holland Park and Kensington Gardens, but no nests or young seen (EPB, RFS).

298 Tree Creeper

M Inner London: Holland Park, one on eight dates from June 17th to Dec. 11th (EPB, H).

299 Wren

In many areas numbers appear to be back to the level of 1962. At least 12 pairs or singing males in Inner London during the breeding season.

300 Dipper

S One trapped and ringed at Gibbs Brook, Godstone, Surrey, on Apr. 13th, was of the British race (RFD). Very full details have been received.

301 Mistle Thrush

At least ten pairs or singing males in the Inner London parks. Bred also at Grosvenor Square, Dolphin Square, Tavistock Square and Grays Inn, and a pair present at St. George's Square (EPB, MLCC, SC, CJK).

302 Fieldfare

Much commoner than in 1964. The largest flocks seen at the beginning of the year were 300 at Hogtrough Hill, Kent, on Feb. 7th (RVW), and 364 at Cuffley, Herts., on Feb. 13th (JAH). Two late birds were seen at Beddington S.F., Surrey, on May 1st (ADP). First arrivals in the autumn were on Oct. 9th and 10th when a large movement N.W. was noted at Farthing Down Woldingham, Surrey (AJH). On the 17th, 200 flew high N.W. at Horton Kirby, Kent (RVW). The next large movement was reported from Sewardstonebury, Essex, on Nov. 5th with *c.* 700 passing N.W. from 09.00 hrs. to 10.00 hrs. and another 120 at 12.00 hrs. (BSMs). From Nov. 23rd there were reports of movements daily until Nov. 28th, but no individual count exceeded 200.

304 Redwing

Commoner than in 1964. The largest numbers seen at the beginning of the year were 500 at Beddington S.F., Surrey, on Jan. 1st (JG), and 400 at Betchworth, Surrey, on Feb. 27th (IRB). On Feb. 19th in the Darent Valley, Kent, there were flocks of up to 100 in several fields (RVW). The first considerable autumn influx occurred as for the Fieldfare on Oct. 9th and 10th, but subsequent reports were of very small numbers, except for a marked Westerly movement at Sevenoaks, Kent, on Nov. 3rd (JGH, JMH).

307 Ring Ouzel

- E Nazeing Meads G.P., one on May 31st (BSMs).
 H Elstree, one on Sept. 18th (EHW).
 M Ken Wood, one on Apr. 2nd (AMG). Inner London: Regent's Park, a male on Mar. 31st (RCG).
 S Beddington S.F., a male on Mar. 28th (FFBM). Chessington, one on Oct. 2nd (DP). Farthing Down, a female on Apr. 3rd (AJH). Headley Heath, three on Sept. 1st (KDE). Richmond Park, a male on May 3rd (AJC). Woldingham, one from Oct. 2nd to 17th (AJH).

308 Blackbird

- M Inner London: Victoria Station, a female was building a nest on platforms 13/14 *c.* 50 yards from the ticket barrier on Apr. 5th (SWMH).

311 Wheatear

First arrivals in spring were one at Greenwich, Kent, and three at Brooklands, Surrey, on Mar. 23rd. They were widespread by Mar. 28th, when there were seven at Perry Oaks, Middx., and the same number at Barn Elms, Surrey. The last passage birds were seen on May 19th, but a pair summered at Littlebrook Power Station, Kent, although there was no evidence of breeding.

Return passage began on July 7th, and continued throughout August and September with stragglers remaining until October, the last being seen on the 24th. Numbers were highest from mid-August to mid-September, but not more than six were seen on one day at any locality.

317 Stonechat

Records of one or two from twelve localities out of the breeding season, including a male at Primrose Hill, Inner London, on Apr. 3rd (DIMW). There were two at Rainham, Essex, on May 22nd (GAF, PRD), and a male at West Hyde G.P., on May 25th (GHMB).

318 Whinchat

Records of breeding or suspected breeding are given. Common on passage.

- E Rainham Marsh, one or two adults on three dates in June and July, and an adult and a juvenile on Aug. 5th and 7th (DB, JHB, PFB, RT).
 H Wormley, one pair reared six young (PRJA).
 M Staines Moor, probably two pairs present; four young seen (DMP).
 K Belvedere S.F., one pair bred successfully; Woolwich Arsenal, two pairs bred successfully (RVW).

320 Redstart

Records of breeding and apparently resident birds are given.

- E Epping Forest, only 11 singing males located although the area seemed to be reasonably well covered. A marked decrease on 1963

when about 56 singing males were present. South Weald Park, one pair bred; Thorndon Park, two pairs bred (APS). Warley, one pair reared young (HMCS).

- M Stanmore Common, an unmated male in May and June (EHW).
 K High Chart, 14 pairs, three of which were known to have bred; Chart's Edge, one pair bred; Hosey Common, two pairs bred; Parson's Marsh, two pairs bred (RVW).
 S Ashtead Forest, one pair bred (RGB, WRI). Esher Common, one pair with fledged young on July 9th (WRI, PJO). Limpsfield Chart, at least two pairs (AJH). Oxshott Heath, a pair with young on June 28th (WRI). Richmond Park, two or three pairs (SM): a female and two juveniles on June 29th (MJW).

321 Black Redstart

Only ten pairs are known to have bred compared with 12 in 1964. New localities were in Paddington, Poplar, Croydon (Fairfield Hall), and Littlebrook Power Station, although it is now known that one pair bred at the last site in 1964. Although at least two singing males were present in the City of London, breeding was not proved, for the first time since breeding was first established in the Cripplegate area in 1942. Other sites occupied last year from which breeding was not reported were Croydon Power Station, Kingston Power Station, Southwark, and the White City. All records are given.

- E/M Lower reaches of the Lea Valley, at least six singing males, of which four bred, all on the Middx. side of the river (JCE, REH, BSMs, JTS, *et al.*). Doddinghurst, Essex, one on Oct. 18th (JTG). Fishers Green G.P., Essex, one on Apr. 30th (RSJ). Kempton Res., Middx., one on Sept. 4th (AJC).
 H Broxbourne pits, a male on Apr. 30th (PRJA). Northaw, one on Mar. 28th (PC, TJ).
 M Inner London: Paddington, a pair feeding at least one young at a demolition site at the corner of Bourne Terrace and Lord Hill Road on July 16th (JR). Poplar, one pair bred at a wool warehouse in West Ferry Road (HM). Cripplegate area, one or two singing from Apr. 1st to June 11th (mo). Fenchurch St., one singing on June 2nd but not subsequently (CW).
 K Littlebrook Power Station, three pairs bred, rearing 11 young (Mr. Hemmings). Elmers End S.F., a female on Apr. 16th (TK, PM). Ruxley, a female on Apr. 9th and May 2nd (FJH).
 S Croydon, one pair bred in the roof of an underground car park at Fairfield Halls (ES). Beddington S.F., a male and female on Aug. 10th (CDH). Brooklands, a female on Apr. 28th and 29th (CO). Merstham S.F., a female on Apr. 11th (DW).

322 Nightingale

Breeding season and Inner London records are given. Some undoubtedly refer to passage birds.

- E Belhus Park, four or five in song on May 23rd (MJA). Epping Forest, bred, but information insufficient to indicate the size of the breeding population. Sewardstone to Waltham Abbey, three in song in May (BSMs). Tilbury Dock, four singing from May 3rd to 26th (AFM).
- M Denham Lock, one singing on June 6th (IGJ). Hampton Court Park, one from May 13th to 20th (PC). Inner London: one on a Cripplegate bombed site on May 8th (RBW), and one singing in the garden of Lancaster House, The Mall, on May 3rd (DM).
- K Biggin Hill, one in song in June (TK). Birds were heard singing in May and June at Shoreham (one), Romney Street (three) and Lower Austin Lodge (two) (RVW). Two were singing in Knatts Valley and at Northfleet on May 9th (RVW, PJS), and single birds in May at Sevenoaks on the 1st, Maplescombe 5th, Farningham 12th, Farningham Wood 17th and Magpie Bottom 21st (JGH, JMH, FJH, RVW).
- S Ashtead Common and Forest, ten singing males on May 10th; two nests in early June (WRI). Epsom Common, three pairs (KDE). Prince's Coverts, nine pairs (KDE). South Nutfield, at least two males singing on May 7th and subsequently (LWC). Birds singing at Chessington on May 1st and 2nd, and at Wimbledon Common on May 5th, 11th and 16th were not heard subsequently (DP, MG, PRM). Banks Common, one on May 23rd (PJO). Caterham, one on May 9th and 20th (AFC, HFG).
- 324 Bluethroat**
- E South Ockenden, a first winter male caught and ringed on Sept. 4th (MPT). Satisfactory details have been received.
- 327 Grasshopper Warbler**
- Breeding season and Inner London records are given. Migrants recorded from twelve other localities.
- E Harold Wood, one singing on several dates from May 1st (RBW). Ongar Park Wood, one reeling and two seen on May 15th (DELW, JTS).
- H Broad Riding Wood, at least four singing on June 8th (BLS, MPI). Cheshunt, one at Thunderfield Grove on May 25th and June 6th; Goff's Oak, one on June 13th (GTH).
- M Inner London: Regent's Park, two on Sept. 10th (RCG). Satisfactory details have been received.
- K Joyden's Wood, up to three on several dates in May (CHD, PWB, VAG).
- S Ashtead Common, up to five pairs (KDE). Bookham Common, one or two singing on several dates from May to June 28th (GB, FCR, PJO). Prince's Coverts, two pairs (KDE).
- 334 Marsh Warbler**
- K Sevenoaks, one in full song persistently imitating the song of the Linnet on May 6th (JGH, JMH).

337 Sedge Warbler

Inner London: Battersea Park, one Apr. 24th, two May 2nd and one May 9th (MCLC).

343 Blackcap

Breeding records for Inner London and a winter record are given.

H Watford, a male at a bird table on Jan. 16th and 17th (PFS).

M Inner London: Holland Park, one pair bred successfully (EPB). Regent's Park, two pairs bred successfully, rearing at least three and one young respectively (DIMW).

333 Reed Warbler

The locality nearest to central London at which breeding was reported was at a small pond at Barn Elms, Surrey, where one pair reared young and possibly a second pair bred (PJS, JMS).

338 Aquatic Warbler

S Beddington S.F., one on Aug. 17th (PJW). Accepted by the *B.B.* Rarities Committee.

348 Lesser Whitethroat

Records received, although inadequate for an assessment of status, suggest that this species was commoner than usual. There were 14-15 singing males in different localities in the Cuffley/Northaw area of Herts. in May and June (JAH, TJ, JL), and up to seven pairs at West Ewell, Surrey (KDE).

354/356 Willow Warbler/Chiffchaff

E Woodford Green, one on Dec. 24th (JGC).

356 Chiffchaff

M Sunbury, one feeding on bread and fat in the observer's garden on Dec. 8th, 9th and 10th (MJR).

357 Wood Warbler

Only one proved case of breeding. Records outside normal passage period and for Inner London are given.

E Epping Forest, singing males at Monks Wood and Loughton Camp on June 26th (JF).

H Broad Riding Wood, one singing on June 28th (GTH). Northaw Great Wood, one or two singing on several dates from May 15th to June 13th (GTH, JDM).

M Stanmore Common, one pair bred (EHW). Inner London: Lincolns Inn Fields, one singing on May 19th (EHW). Regent's Park, one on Aug. 7th and 15th (RCG).

K Hayes Common, one singing on May 7th and for the remainder of the month; thought to have nested (AWB). For all other records for the county we are indebted to one observer, R. V. White: Crockham

Hill Common, one on May 2nd, two on May 24th, one on June 14th; Parsons Marsh, two on May 3rd, one on June 6th; Shoreham Downs E., one on May 7th, two on May 25th, one on June 6th; Shoreham Downs W., two on June 1st; Brasted Chart, one on May 24th and June 2nd, two on June 25th; Hosey Common, three on June 23rd; The Chart, two on June 25th.

- S Bookham Common, one singing on June 27th (RAD, MJW). Chelsham a pair on May 15th, one on June 20th (IGM). Epsom Common, two singing males on May 30th, one on June 7th and 22nd (WRI, FCR). Limpsfield Chart, one on June 19th (AJH). Warlingham, one on June 12th (RFGP). Woldingham, a pair on May 14th and 15th, and June 4th and 13th (IGK).

364 Goldcrest

Widespread out of the breeding season, especially at the end of the year, when there was a considerable influx in the second half of October. There were *c.* 200 in the Hosey Common/Brasted area on Oct. 23rd and Dec. 12th (RVW). Still scarce in the breeding season for which all records received are given.

- M Osterley Park, one pair in the breeding season (DGH).

B Black Park, one singing on May 16th (IGJ).

- S Ashurst Rough, one on June 1st (GMC). Coulsden Court G.C., one singing during the breeding season (RGB). Godstone, one singing near the town pond during the breeding season (RGB); one feeding two juveniles by the church on Aug. 8th (FFBM). Norbury Park, one on May 5th (GMC). Painshill Park, three singing on May 1st (WRI). Shirley Hills, two or three singing during the breeding season (RGB).

365 Firecrest

- M Kenwood, one on Apr. 1st (MT). Satisfactory details have been received.

366 Spotted Flycatcher

- M Inner London: Holland Park, probably two pairs present; bred successfully; one pair may have been double brooded (EPB). Hyde Park, two pairs bred (RFS).

368 Pied Flycatcher

Only three records in spring, but more frequent on the autumn passage. All records are given.

- E Bow Creek Wharf, one on Aug. 18th (JTS). Chigwell, one on Sept. 6th (KN). Epping Forest, one on Aug. 8th and 30th (DIMW).

- M Broomfield Park, one on Sept. 10th (FJL). Hampstead Heath, one on Sept. 12th (JA). Mill Hill, several on Sept. 1st (EHW). Inner London: Holland Park, one, possibly two, on Sept. 9th, one on Sept. 11th and 14th (EPB). Regent's Park, two on Aug. 18th, one on Sept. 1st and 6th, two on the 9th, five on the 10th and one on the 11th (RCG). St. George's Gardens, one on Sept. 8th and 12th (sc).

- K Greenwich Park, seven individuals from Sept. 4th to 14th. Seven-oaks, one on Oct. 2nd (JGH, JMH).
- S Barn Elms Res., a male on Apr. 25th (PRM, PJS) and a female on May 16th (MDK); two on Sept. 11th (LRS, WR). Epsom Common, one on Apr. 30th (DR).

371 Hedge Sparrow

- M Inner London: Holland Park, bred successfully; nine singing birds (EPB). Hyde Park and Kensington Gardens, bred; 13 singing males (RFS). Regent's Park, six singing males were reported by EHW on May 25th; previous experience suggests that the breeding population would be much larger.
- S Inner London: Lambeth, one pair bred in Archbishop's Park (GHG).

376 Tree Pipit

- M Inner London: Regent's Park, one on May 13th; one on July 24th and Aug. 28th, two on Sept. 10th (RCG). Bloomsbury, one near the Senate House on Oct. 8th (EHW).

379 Rock and Water Pipits

All records of Rock Pipit (*petrosus*) and of birds having the characters of Water Pipit (*spinoletta*) are given.

- E Rock Pipits at Girling Res., on Mar. 21st and King George V Res. on Nov. 6th (JF) and at Walthamstow Res. on Dec. 4th and 27th (RFH, JF).
- H/M Colne Valley from Watford to West Hyde, and adjacent stretches of the Gade and Chess: up to five Water Pipits at any one locality from Jan. 1st to Apr. 10th (mo); on Feb. 7th 1961 considered there were 13 in the whole area; on Jan. 23rd when 1961 reported two Water Pipits at Cassiobury Park, HMCKB claimed there was one Rock Pipit there; from Nov. 1st to the end of the year one or two Water Pipits were again present (mo); on Dec. 19th DH claimed two Rock Pipits at West Hyde.
- M Brent Res., single Rock Pipits on Oct. 4th and Nov. 18th (LAB). Queen Mary Res., one Rock Pipit on Mar. 9th, two on Oct. 5th and one on the 19th (BEC, MJR). Inner London: Regent's Park, a Water Pipit feeding on a butter wrapper on a rubbish dump (DIMW).
- K Elmers End S.F., a Rock or Water Pipit on Nov. 21st (PM). Swanscombe, a Rock Pipit on Jan. 17th (DFB, PAD, DJH).
- S Barn Elms Res., single Rock Pipits on Mar. 14th and Nov. 6th (PJS). Beddington S.F., one Water Pipit on Mar. 16th, one on the 27th, three on the 29th and one on the 30th (ADP); on Mar. 28th FFBM saw a Rock Pipit; one Water Pipit on Dec. 2nd and two on Dec. 11th (ADP).

380a Pied Wagtail

Records of possible breeding in Inner London, and of an unusual roost are given.

- H Barnet, from May 4th to June 20th there was a roost on projecting bricks on the wall of a supermarket in the High Street; the maximum reached on May 5th was 44, falling to six by June 20th (FM).
- M Inner London: Dolphin Square, a resident pair were seen collecting food during the breeding season but no young were located (MCLC). Ropemaker Street, two juveniles being fed by a parent on Aug. 12th (AME).
- S Inner London: Battersea Park, one feeding a juvenile still with down on its head on May 29th (MCLC).

380b White Wagtail

- E Hainault, one on Apr. 5th (KN).
- H Rye Meads, two on Apr. 15th and one on the 16th (RMRG).
- M Perry Oaks S.F., and Staines Res., up to eight from Mar. 21st to Apr. 23rd (mo).
- S Barn Elms Res., one on Apr. 2nd (AJC). Beddington S.F., an adult male on Mar. 30th. Wimbledon Common, two on May 6th (JG).

381 Grey Wagtail

About ten pairs compared with only four in 1964. Breeding season records are given.

- M East Hendon, one pair bred (EHW).
- K Brasted, a pair on Apr. 4th and an adult and two juveniles on July 14th; French Street, a pair feeding young in a disused water wheel on June 16th and 23rd; Chart's Edge, 1-3 pairs probably bred, four including a juvenile on June 27th (RVW).
- S Carshalton, a pair feeding young at nest in a factory site by the River Wandle from May 4th to 14th (LWC). Ewell, two on Apr. 17th and 23rd, one on June 4th and a juvenile from July 8th to 21st (JRB). Godstone, two pairs bred (AFC). Leatherhead, one pair bred (WRI). Thorpe, two juveniles being fed by a hen on May 30th (GHG).

382 Yellow Wagtail

As it is now ten years since the breeding distribution of this species was published, all records of birds breeding would be welcomed. A first winter bird ringed on Aug. 30th, 1965, at Thorpe, Surrey, was caught alive about Dec. 1st, 1965, at Thiès, Sénégal, West Africa.

Some 23 birds having characters of races other than *flavissima* were reported, 14 of which were considered by the observers to be *flava*.

383 Waxwing

The first record for our Area following the large irruption of this species into Britain in mid-October, was a single bird at Oxshott Heath on Oct. 19th, followed by three at Kingswood on the 23rd. No more were seen until Nov. 6th, and it was not until the end of that month that they were at all widespread. The largest flock

reported was *c.* 40 at Merstham at the end of the year. They were commoner south of the Thames than north. All records are given.

- E Harold Wood, one on Dec. 27th (MPT). Hutton, two in the last week of November (PRD, GAF).
- H Cheshunt, one on Nov. 10th (BSMs). Bushey, one on Nov. 16th (ADT).
- M Ealing, three near the Common on Nov. 12th (LGB). Mill Hill, one on Dec. 24th (EHW). Potters Bar, single birds on Nov. 6th, and Dec. 5th (RFS, JPW). Ruislip Manor, one on Dec. 4th (RG). Inner London: Birdcage Walk, one on Dec. 22nd (DFM).
- K Blackheath, one on Nov. 25th (EFA). Kemsing, *c.* 20 from Dec. 5th to 11th. Orpington, 1-3 from Nov. 28th to Dec. 1st (PMW). Otford, two on Nov. 28th three on Dec. 13th and one on the 14th (MHE, EAG, JGH, JMH). Riverhead, two on Dec. 16th; Sevenoaks, three on Nov. 29th (JGH, JMH).
- S Banstead Newton, eight on Nov. 16th, 15 on the 17th and two on the 28th (TG, BAM). Chessington, one on Nov. 28th, nine on Dec. 7th, three on Dec. 26th (one of which died), two on the 28th, one on the 30th and 31st (DP, SG). Epsom Downs, 14 on Dec. 25th and nine on the 26th (MG). Holmethorpe G.P., *c.* 10 on Dec. 26th (RABd). Kingswood, three on Oct. 23rd and seven on Dec. 15th (KDE, ROB). Merstham, *c.* 40 from Dec. 28th to 31st (GJD, LP). Oxshott Heath, one on Oct. 19th (MJM). Purley, two on Dec. 11th and three on the 12th (RFL). Sanderstead, one on Nov. 21st (LWC).

384 Great Grey Shrike

- E Hainault Forest, one throughout January was presumably the bird seen there on Dec. 23rd, 1964, (RJL, SDW). (See *L.B.R.* No. 29 for 1964).
- H Rye Meads, one on Mar. 21st, 25th to 27th and on Apr. 1st (RMGR, RAB, LL-E). Munden, one on May 9th (RWS). Northaw, one on Oct. 24th (TJ, JL). Panshanger estate, one from Nov. 7th to 9th (MPI).
- M Bentley Priory, one on Oct. 22nd (GHMB).
- K Ruxley, one on a number of dates from Nov. 16th to Dec. 19th (mo).

388 Red-backed Shrike

A further reduction in the breeding population. All records are given.

- E Sewardstone, a pair present during the breeding season in a restricted area probably bred (PRJA).
- H Hilfield Park Res., a young bird on Aug. 28th (EHW).
- S Ashtead Common, a pair in Newton's Wood on July 4th (CRAC). Bookham Common, a single male on five dates from June 6th to July 4th, but no female seen (GB, LM, FCR). Caterham, probably two pairs, one of which is known to have bred rearing two young (AFC, LWC, GCG, IGM). Epsom Common, one pair resident from July 2nd (AME). Headley Heath, one on May 22nd and June 7th, and a pair

on July 10th (ACC, BEC). Farthing Down, a male carrying food on July 15th (AJH). Thames Ditton Common, a male on July 10th (CRAC). Wimbledon Common, a pair with juveniles from Aug 4th to 11th (DB, PRM).

391 Hawfinch

Breeding season distribution and a record for Inner London.

- E Epping Forest, recorded, but no conclusive evidence of breeding (JCE, DIMW).
- H Mimms Wood, eight nests found (RB). Northaw, one at the Great Wood on May 1st and 29th (GTH, TJ, JJ), and 2-3 at Nyn Park on June 12th (JPW).
- M Bentley Priory, two on Apr. 28th (GHMB). Ruislip, one on June 22nd (BPP). Inner London: Regent's Park, a male on July 17th (RCG).
- K West Kingsdown, one on Apr. 30th (DC). Lullingstone Park, one on June 11th; Knatts Valley, one on June 13th (RVW).
- S Kew Gardens, a pair on Apr. 28th and May 23rd; probably bred (LB).

392 Greenfinch

Continues to increase. Ninety-six were ringed in a garden at Islington, Middx., by RWG during the period August to December, and over 100 by LWC in a garden at Sanderstead, Surrey during the first three months of the year. Flocks of over 200 were reported at Weald Park, Essex, on Sept. 30th by MPT, and at Osterley Park, Middx., from September to November by DGH.

In Inner London, bred at Hyde Park and Kensington Gardens (four territories—RFS) and at Lambeth Palace Gardens (one pair—GHG). There were four singing males at Regent's Park on Apr. 12th (EHW) but no reports of breeding have been received; it would be most surprising if some pairs did not breed. Holland Park, two singing males recorded; probably bred (EPB).

393 Goldfinch

A note by W. Ruttledge in the October, 1965, issue of *British Birds* (Vol. 58, No. 10, p. 442) gives details of a roost in plane trees in Cromwell Road and Exhibition Road. The roost was probably occupied towards the end of 1964, but was first confirmed on Jan. 4th when it was being used by 10 or more Goldfinches. On Jan. 12th and 15th about 40 were grouped in the lowest branches of a tree at a height of about 30 feet. On Jan. 23rd when sc visited the site the number which eventually settled to roost in two planes on the East side of Exhibition Road was 105. The roost continued in use until at least Apr. 6th on which date observations ceased, there being 50-60 on Feb. 12th, 30-40 at the end of the month, smaller numbers throughout March and 13 on Apr. 6th.

A bird ringed on Oct. 25th, 1964, at Elmers End S.F., Kent, was recovered in January, 1965, at Angoulere, Charente, France.

394 Siskin

Much commoner than in 1964. At Fishers Green, Essex, in an area which was once part of the Royal Gunpowder factory and was planted with large numbers of Alders as a source of charcoal, PRJA estimated that there were up to 200 in January, up to 250 in February and up to 350 in March. These figures were not equalled elsewhere, but there were 100+ in Alders at East Bedfont, Middx., on Feb. 28th and Mar. 2nd (AF), and smaller numbers in many localities. Apr. 15th was the last date on which any were seen in spring. Apart from a very early bird at Sanderstead, Surrey, on Sept. 14th (AJH), the autumn immigration began on Oct. 16th. Numbers were smaller than at the beginning of the year, but there were up to 90 in December at Fishers Green (PRJA), and 80 at Sevenoaks, Kent, on Dec. 29th (JGH, JMH).

In Inner London, males were seen in Bloomsbury on Feb. 22nd and Mar. 30th (EHW) and one in Regent's Park on Oct. 19th and 23rd (RCG).

395 Linnet

rvw noted 300 flying S.W. from 07.30 to 08.30 hrs. on Sept. 27th at Danson Park, Kent.

At Clapham Common, Surrey, there was a sudden increase from *c.* 100 to *c.* 400 on Mar. 3rd; snow fell later in the day (MB).

396 Twite

S Riddlesdown, a male on Mar. 27th (MSA). Satisfactory details have been received.

397 Lesser Redpoll

Breeding season distribution is given. Birds considered to have the characters of the race *flammea* (Mealy Redpoll) were seen by KN at Hainault, Essex, on Dec. 15th, by JA at Hampstead Heath, Middx., on Dec. 30th and by LAB at Brent Res., Middx., on Oct. 17th.

E Epping Forest, DIMW considered that the total breeding population could be as high as 20-25 pairs. Ongar Park Wood, two singing males at the end of April (DELW).

M Hampstead Heath, present in small numbers in the breeding season (AC); a pair with young on June 27th (EHW). Mill Hill, a pair bred by the golf links (EHW). Stanmore, seven on May 9th (EHW).

K rvw reported birds at the following localities: Crockham Hill, three pairs May 2nd, three on June 14th; Badger's Mount, one or two pairs on May 5th and June 25th; Sundridge, two or three pairs on May 11th and June 19th; Parsons Marsh, one on June 2nd; French Street, a pair feeding young on June 23rd; Hosey, probably three

or four pairs, young being fed on June 23rd; Chart's Edge, one or two on June 27th; Shorehill, one on June 28th; Foxwold, one or two on June 30th. Other reports: North Cray, one on May 10th (CHD); Joyden's Wood, six on May 20th (VAG).

- S Arbrook Common, a pair on May 2nd (WRI). Banstead Heath, one pair (HB); a nest with four young found on July 19th (MJCd). Bookham Common, two displaying males in breeding season (GB). Esher Common, *c.* four pairs (WRI). Fairmile Common, *c.* four pairs; one nest found (WRI). Itchingwood Common, one on May 2nd (RGB). Littleworth Common, one pair (CRAC). Painshill Park, two singing on May 1st (WRI). Prince's Coverts, one or two singing on May 11th (WRI). Walton Heath, a male feeding two young on July 21st (MJCd).

401 Bullfinch

Two noteworthy flocks and Inner London records are given.

- H Ridge, *c.* 70 with Greenfinches on Feb. 13th (ASK).
 M Queen Mary Res., *c.* 50 on ground near the reservoir on Dec. 4th (GHG). Inner London: Holland Park, a male from July 6th to 10th (EPB). St. James's Park, a female on Aug. 27th and two males and a female on Oct. 15th (GHG).
 S Inner London: Lambeth, a male in Archbishop's Park on Nov. 15th (GHG).

404 Crossbill

All records are given. None in the autumn for the first time since 1962.

- M Scratch Wood, a pair on Feb. 5th (EHW).
 S Oxshott Heath, six on Mar. 13th (IRB). Reigate Priory, *c.* 20 on Mar. 28th (DW). Leatherhead, one flying E. on Apr. 4th (IRB).

408 Brambling

Few reported in January until the end of the month, but quite common in February and March. The largest flocks reported were *c.* 150 at Queen Mary Res. on Feb. 28th (MJR) and 110 at Chandlers Cross, Watford, Herts. on Apr. 3rd (JRB); the last one seen at Staines Res., on Apr. 23rd (MJR). First arrivals in the autumn were noted on Oct. 5th, but the largest number seen was only 39 in Regent's Park, Inner London, on Oct. 27th (RCG). Other Inner London records were, in the autumn, 16 in Regent's Park on Oct. 23rd and 15 there on Oct. 30th (RCG), and at the beginning of the year, one on Feb. 14th at Holland Park (EPB), and one in Regent's Park on Mar. 27th (RCG).

409 Yellowhammer

- M Inner London: Hyde Park, one on Feb. 23rd (RFS); Regent's Park, two on Mar. 25th, one on Apr. 15th and one on Oct. 10th (RCG).

410 Corn Bunting

Breeding season distribution and Inner London records are given.

- E Rainham, two singing males; Fairlop, three singing males (MSF). Cranham, North Ockenden, Warley and Belhus Park, small numbers in the breeding season, but no young seen (MJA). Hainault Lodge, eight males in May (ACP).
- H London Colney and Shenleybury, six singing males (ASK). Maple Cross, one on June 13th (JRB). Troy Mill, a male on May 5th and 12th and July 30th (IGJ). West Hyde, two males on June 14th and 19th (IGJ).
- M Bedford, one pair (DMP), Perry Oaks S.F., one pair (DMP). Inner London: Regent's Park, one Mar. 26th; one Oct. 16th (RCG).
- B Iver, two singing on June 6th (PJS).
- K RVW found a total of 67 singing birds in the Darent Valley from Wilmington to Shoreham covering three miles on either side of the river. Dartford Marshes, one on May 24th (AWB).

415 Cirl Bunting

- K Brands Hatch, a male carrying food on June 7th (JJMF).
- S Wimbledon Common, a male on May 1st and 11th (PRM, LRS, WR).

421 Reed Bunting

- M Inner London: Regent's Park, one on Apr. 8th; two on Sept. 15th and Oct. 10th and one on Oct. 20th (RCG).

423 Snow Bunting

- M Queen Mary Res., one on Nov. 23rd (BEC).

424 Tree Sparrow

Further additions to the breeding distribution given in the *L.B.R.* No. 27 for 1962, No. 28 for 1963 and No. 29 for 1964, and Inner London records are given.

- M Harefield Moor, several pairs (IGJ). Stanmore Common, several pairs (EHW). Inner London: Regent's Park, two on Mar. 21st, one on Sept. 18th, two on Sept. 25th and Oct. 19th (RCG).
- B Near Langley, *c.* six pairs (PJS).
- K Stone, four on May 9th; Bean, *c.* ten on May 9th; Northfleet Green, four on May 9th (PJS). High Elms, one pair (PMW). Kemsing, 6 on May 8th (HFG). Chart's Edge, one or two on June 27th (RVW).
- S Dulwich Common, one pair (HEP). Riddlesdown, three pairs (CDH). Thorpe 12 pairs (GHG).

Additions and Corrections to the London Bird Report, 1964

6 Red-necked Grebe

M Queen Mary Res., the bird which was first seen on Sept. 28th, 1963, was still present on Mar. 21st (FJL).

7 Slavonian Grebe

M Queen Mary Res., one on Mar. 21st (FJL).

134 Ringed Plover

M An adult ringed at Perry Oaks S.F., on Aug. 22nd, 1962, was recovered on June 5th, 1964, at Umugtuarmuit, Anmagnalik, S.E. Greenland (BEC).

223 Sandwich Tern

M King George VI Res., at least 16 on Sept. 17th (CMV).

321 Black Redstart

M Inner London: the dates for the male singing in the Tottenham Court Road area should read June 12th to July 1st (BHH).
The hen seen on Apr. 9th by FJL was at Broomfield Park, Palmers Green, not Broomfield Place, Ealing.

388 Red-backed Shrike

S Delete entry for Riddledown.

Amend entry for Whyteleafe to read: one pair had two broods, and a second pair seen on July 26th only (MSA).

Study of a Wintering Lapwing population in North West Middlesex

By STUART E. CROOKS and PAUL A. MOXEY

Summary

1. The wintering Lapwing (*Vanellus vanellus*) population of Pinner Park, an area of farmland in North West Middlesex, was studied over a period of ten years.
2. The present status of the Lapwing in the area is compared with past records of the species.
3. It was noted that the first birds usually arrived in late October, and that numbers rose steadily until a mid-winter peak, declining thereafter until the final departure of the flocks in early March. Certain fluctuations within this general pattern were noted, and a comparison of the Lapwing numbers with climatic data from local meteorological stations shows that numbers tended to fall during periods of "hard" weather.
4. The distribution of the wintering flocks at Pinner Park is compared with both the changing pattern of land-use, and with field-size.
5. The status of the Lapwing at Pinner Park is compared with evidence from other parts of North West Middlesex and elsewhere.
6. Lapwing flight-records from North West Middlesex and South West Hertfordshire are analysed and discussed.

Introduction

Following a recent national enquiry, Lister (1964) suggested that there had been little change in the overall status of the Lapwing in Britain during the past 25 years. Despite a lack of detailed documentation, however, the North West Middlesex district seems to be an area where urban growth and the consequent habitat destruction have caused a decline in the numbers of this species. The work of Harrisson (1930) indicates that the Lapwing was already an uncommon breeding species in the area during the inter-war period, and the number of nesting birds has declined further since that date. Today, the status of the Lapwing in North West Middlesex is largely that of a wintering species: this paper is the result of a study of one wintering population within that area, and is based upon observations made over the last ten years.

Between September 1954 and January 1963, regular counts were made of the wintering Lapwing flocks at Pinner Park Farm, Middlesex. Until 1957 these counts were part of a general bird census which was being carried out in the area, and the results of which have been published elsewhere (Moxey and Seel, 1961). Regular specific Lapwing counts were carried out during the winter months from 1957-1958 until 1962-1963; after this, occasional visits were paid to the area until December 1964.

During the period of the general bird census, the regular appearance of the Lapwing flocks in early autumn, and their gradual build-up in

numbers to a winter maximum, declining thereafter until their departure in early spring, had been noted. The period of specific Lapwing counts confirmed this basic pattern.

Subsequently, the Pinner Park data has been correlated with records of Lapwing movements within the wider area of North West Middlesex and South West Hertfordshire, and with climatic data from local meteorological stations.

Description of the Study Area

Situated $10\frac{3}{4}$ miles, as the crow flies, north west of Hyde Park Corner and still in Middlesex, but not far from the Hertfordshire border, Pinner Park Farm is isolated from ecologically similar areas by surrounding suburban development. The area consists of some 230 acres of mixed farmland largely surrounded by housing estates, mostly of pre-war or immediate post-war date. On the south side of the farm there is a small area of playing-fields separating Pinner Park from the nearest suburban development, whilst on the north east side the farm is bounded by the main London Midland Region railway line. A second group of playing-fields lies either side of the railway and links Pinner Park with a more continuous stretch of agricultural land which lies about half a mile north east of the farm and has many similarities to the study area. In addition to the railway, the farm is crossed north-south by the A4090 and east-west by a rough track from Headstone Lane to Pinner; although primarily a footpath, the part of this track between Headstone Lane and the A4090 is occasionally used by motor traffic. (See Fig. i).

Almost the whole of Pinner Park is situated on the London Clay, although in the north west the River Pinn (see below) has cut into the underlying Reading Beds. The geology of Pinner Park is in fact more complex than might appear at first sight, since the capping of pebbles on Nower Hill in the west of the area represents the basal bed of the London Clay which has here suffered heavy erosion after being thrust up by local warping of the underlying strata. Although the remainder of the farm is at a lower altitude than Nower Hill, the rock is in fact the higher part of the London Clay, plus, no doubt, some downwashed material from the heavier clay which once overlaid the basal beds now exposed on the hill. Apart from the London Clay and the Reading Beds, the only other rock in the area consists of some alluvial deposits along the River Pinn.

As a consequence of the geology of Pinner Park, with the exception of the fields on the flanks of Nower Hill, drainage is poor and the soils of the area are heavy; waterlogging is a common feature during the winter months and in periods of wet weather at other times of the year. The average altitude of the area is 225 feet above sea level, the highest point being 250 feet and the lowest a little below 200 feet.

Although the area has been described as one of "mixed farmland", there is a strong bias towards dairy cattle, and most crops have been raised for the purposes of fodder. Seel (1959), in an analysis of the crop-ratio

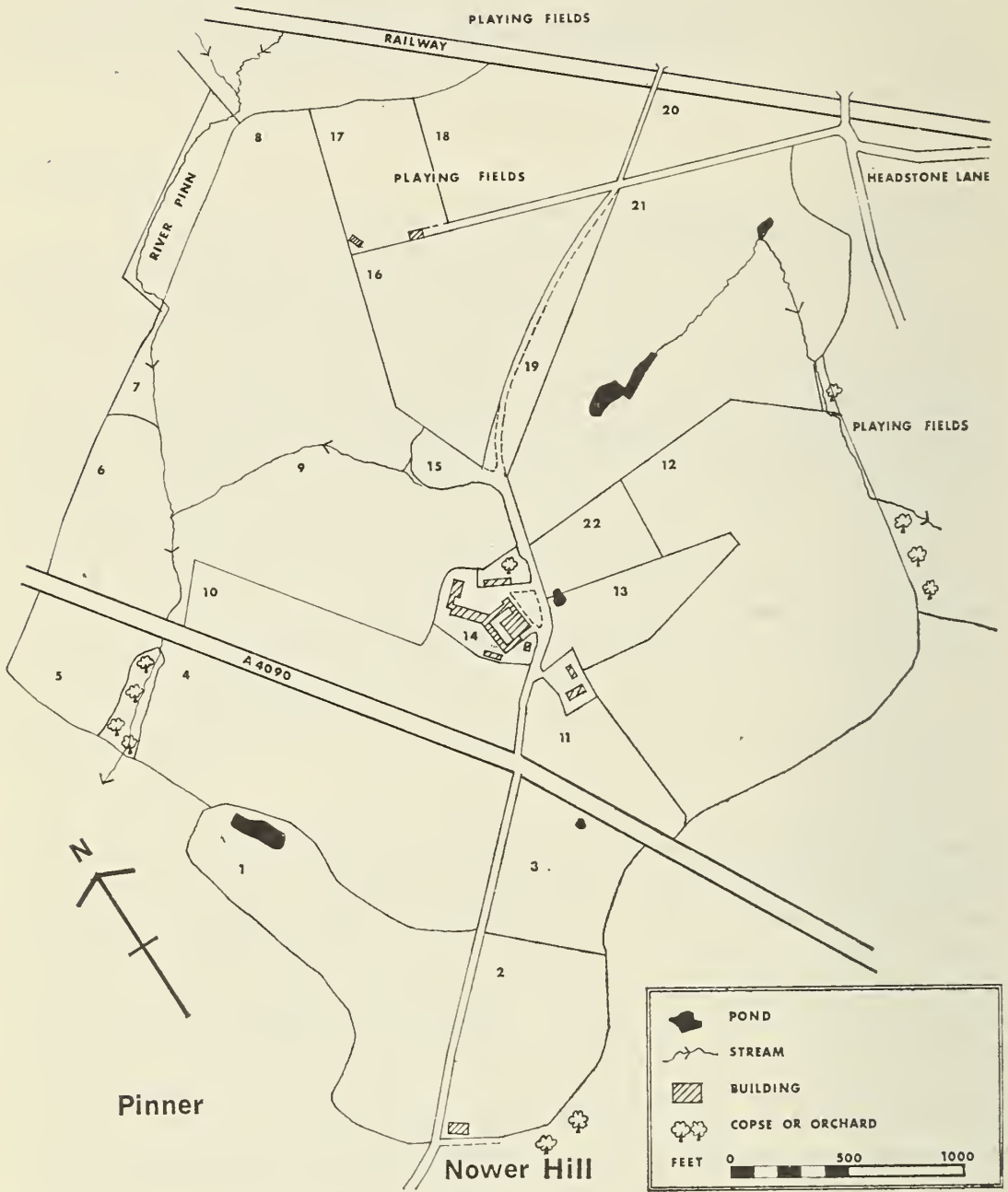


FIG. I. PINNER PARK FARM

for the period 1954-1959, found that grass, either for grazing or fodder, was predominant. This trend was continued in the period 1960-1964 (see Fig. ii).

The chief stream on the farm is the River Pinn, and this has largely been incorporated into the ditch-system. The only other permanent water in Pinner Park is in the ponds, which were probably dug in the last century (Seel, 1965). The ponds are, however, subject to infilling: at the beginning of the study they numbered eight; today, there are four, the largest consisting of a pool of irregular shape and some 1,400 square yards in area. The remaining three ponds are considerably smaller.

The size of the fields on the farm varies considerably, the smallest being one acre and the largest thirty-two; the average field-size is ten acres.

The fields are separated by hedgerows, mainly of Hawthorn (*Crataegus monogyna*) but with occasional Dog Rose (*Rosa canina*) and Elder (*Sambucus nigra*) amongst the more common constituent species. There are many standard trees incorporated into the hedgerows, chiefly Common Oak (*Quercus robur*) and Ash (*Fraxinus excelsior*); occasional Oaks stand isolated in some of the fields.

The height of the hedges varies according to the particular phase of the hedging programme; at the beginning of the study, some of the hedges were extremely tall and unkempt, being in places ten feet or more; at the time of writing, however, the hedges are in a much better condition, and five to six feet is the average height. In the smaller fields, particularly, the hedges detract from the general "openness" of the area and are therefore, according to some writers, likely to render them less attractive to a species, such as the Lapwing, with a preference for "open" areas (Tucker, 1941). It is to be doubted, however, whether this actual difference of hedge-height has of itself been of any significance during the period of this study; the importance of the concept of "openness" is discussed in some detail below.

Being adjacent to urban areas, Pinner Park suffers to some extent from problems of public pressure, although the amount of this is, in the circumstances, surprisingly small. A small amount of shooting takes place on the farm, and this does seem to have the expected result of driving the flocks away from the immediate vicinity to more distant fields; but the overall significance of shooting, like the occasional trespass by dogs and humans and the more regular disturbance due to agricultural activity or road and rail traffic, seems to be negligible.

Past History of the Species in the Area

There are few records of the past status of the Lapwing in the North West Middlesex area. The present writers have been assured by local residents that the species used to be seen on Pinner Park all the year round, but it has proved impossible to obtain any precise information concerning this, despite appeals for information through the media of the local Press and natural history society. There is one firm breeding record for the Park in 1936, but no indication as to whether this was an isolated case or

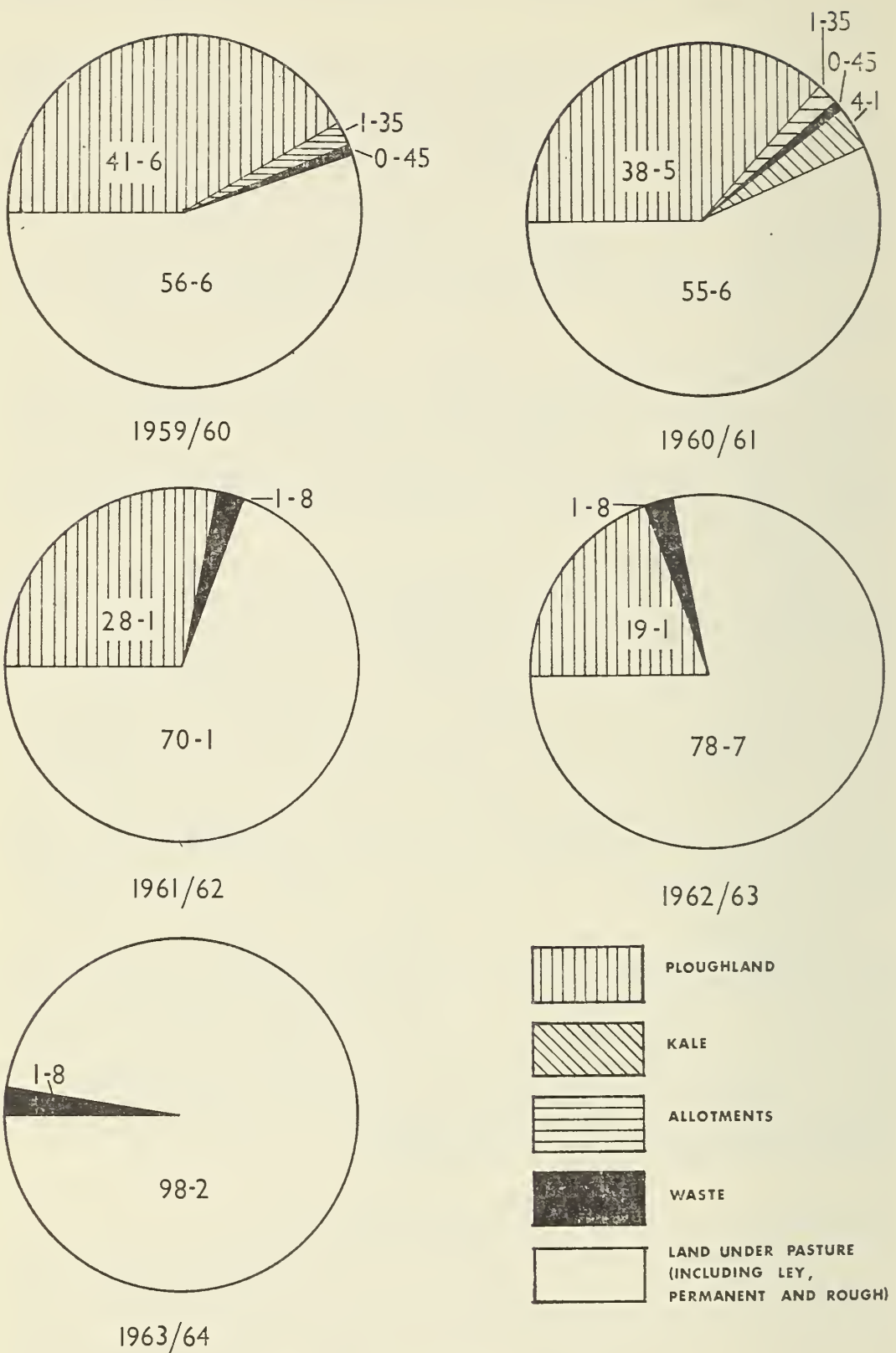


FIG. II. WINTER LAND-USE; PERCENTAGE COVER 1959/60-1963/64

one of several nests. Twenty-one years later, breeding by two pairs was suspected, but not proven (Moxey and Seel, 1961).

Harting (1866) refers to the Lapwing as being resident within Middlesex as a whole, but does not make any specific reference to the Pinner area; Swann (1893), however, does state that the species was then breeding around Harrow, which general locality would probably include the Pinner district, but gives no indication of the abundance of the birds.

Barrett-Hamilton (1891), writing of the period 1885-1890 and covering a radius of five miles from Harrow, which would include Pinner Park, states that the Lapwing was then resident and lists a number of breeding localities, but does not include Pinner amongst them. Dixon (1909), however, does make specific reference to the species as a "tolerably regular visitor" to Pinner and Harrow. It is unfortunate that this phrase gives no indication of the season in which Dixon recorded the species at Pinner, but, judging from the works of other earlier writers, he was probably referring to the wintering flocks, which seem to have been a feature of North West Middlesex for at least the past century (see below).

Harrison (1931) is another of the few writers who have made specific reference to the Pinner area; like Barrett-Hamilton, he took as his area a five-mile radius from St. Mary's Church, Harrow, and wrote of the Lapwing as "uncommonly breeding" within it.

Although Glegg (1936) refers to the Lapwing as resident in Middlesex, he makes no particular mention of Pinner, and his notes are of more interest in relation to flockings. He observed that the numbers were much increased in the winter, and that autumn migration, especially in August, raised the size of flocks to 500, although 200 was the average winter flock-size. Harting also refers to large spring and autumn flocks on "fallow and waste". These observations by Harting and Glegg throw no light on the past status of the Lapwing at Pinner Park as such, but are of significance when set against more recent records of Lapwing movements in North West Middlesex as a whole.

Local information suggests that the regular breeding of Lapwings at Pinner Park ceased some time shortly before or during the 1939-1945 war, but it is doubtful whether many birds were involved, particularly towards the end of the period. The species was losing ground in Middlesex in the late 1920's and early 1930's as suburban housing spread (London Natural History Society, 1964). There are no records to suggest that the temporary wartime increase in arable acreage caused a revival of Lapwing numbers at Pinner, as it did at other localities such as Harrow (Harley, 1949), Hampstead and Richmond Park. Neither is there any evidence that improved land drainage at Pinner has, in recent times, caused the abandonment of breeding grounds by the species, as has been true of the district between Northwood and Harefield (London Natural History Society, 1964). Field drainage was, however, of generally late introduction in Middlesex, as hay for the London market was the predominant crop in the nineteenth century and it was believed that drainage reduced the quality of the grass (Rees, 1954). Pinner Park was producing hay for the London market until shortly after the 1914-1918 war, and it is possible that improved

drainage in the past fifty years is related to the gradual decline of the Lapwing's breeding in the Pinner area.

It is not possible, with any precision, to suggest a date when the main Lapwing population at Pinner Park became a wintering one, although one might guess that this was shortly after the 1914-1918 war. As has already been noted, the presence of wintering flocks in the area is a well-established feature of not only Middlesex in general, but Pinner in particular. Harrison (1931) makes reference to the break-up of these local wintering flocks in March; he was, of course, writing of a much more rural area, but his observations are confirmed by those of the present writers, working some thirty years later and within a much more restricted district.

Fluctuations in Flock Size in relation to Weather conditions

During the period covered by the study, it was found that the first Lapwings arrived in Pinner Park during late September, or in October; the earliest date of arrival was September 18th, the latest October 27th. The initial influx of birds was always small, the highest number of initial arrivals being recorded in 1955, when 47 birds were seen.

Following the arrival, the build-up in numbers was gradual, the maximum being attained in late December or early January, although in one year, 1961, the maximum was not reached until February. The fall away from this peak again tended to be gradual, although this was less true than in the case of the build-up. The birds usually left the area in March or early April, the only exception to this being during the severe winter of 1962-1963, when the birds left the Park at the onset of hard weather in late December and did not return that season.

Within this general pattern, however, certain marked fluctuations were observed, and there were periods during the winter months when no Lapwings at all were recorded within the study area, whilst at others there were fluctuations in the size of the wintering flock. The overall pattern of these fluctuations is illustrated by Figs. iii and iv.

A comparison of the records of flock-size with climatic data in general, and with the state of the ground in particular, lends weight to the suspicion that this last is an important factor in determining the size of the wintering flock. As a general rule, when the state of the ground rose to "3" or more (i.e.: when the ground was frozen or covered with snow), there was a fall in numbers, the rate of decline seemingly being related both to the severity and the length of the hard spell.

It should be mentioned that the bulk of the meteorological data is based on the readings taken at the Wealdstone Station, which lies about half a mile to the south east of Pinner Park. It was felt that the Wealdstone figures were the most appropriate to the study area, but they were unfortunately incomplete. Two alternative sites were available: Oakwood (Southgate) and Garston (Watford). Oakwood was selected as being (i) an open area surrounded by houses on the fringe of London, and thus similar to Pinner Park, (ii) not woodland, as was the case with Garston, (iii) similar to Pinner Park, and unlike Garston, in being away from the local influence of the Chilterns, (iv) having an altitude (221 feet a.s.l.)

which was, although higher than Wealdstone, similar to Pinner Park, (v) having a more complete run of records than at Garston. In fact, comparison of the Oakwood and Wealdstone records showed a strong similarity, and the writers feel certain that the use of climatic data from two stations does not seriously distort the relationship shown between the numbers of birds and the weather records. The Oakwood figures are for January, February and March 1959; December 1961; February 1962; March 1962; November 1962; January, February, March 1963. Oakwood lies about $10\frac{1}{2}$ miles east north east of Pinner Park.

The incidence of "hard weather" (i.e.: when the state of the ground was "3" or more—see table 1) is shown in Figs. iii and iv.

TABLE 1
SIMPLIFIED CODING FOR THE STATE OF THE GROUND

<i>Code</i>	<i>Description</i>
0	Surface of ground dry.
1	Surface of ground moist to muddy.
2	Surface of ground wet; water standing in pools.
3	Ground frozen.
4	Glaze on ground, without snow or melting snow.
5	Ice, snow or slush, covering less than half area.
6	Ice, snow or slush, covering more than half area.
7	Complete snow cover to depth of up to six inches.
8	Loose, dry snow or sand covering area incompletely.
9	Complete cover of loose dry snow or sand.

1954-1955

The first birds were recorded on October 10th when 21 were present; by December 31st the flock had built up to a total of 120 birds. There followed a period of intense cold, during which numbers fell to 14 (January 16th), only to rise again to 138 (February 5th) with the return of warmer conditions.

1955-1956

The first birds appeared on October 23rd, when 47 were seen. By December 4th numbers had built up to 220; there was a slight fall on the 17th, but numbers had reached a new peak (258) by the end of the month. Although January saw a decline, to 109 birds on the 28th, a period of hard weather during February was accompanied by the birds' complete departure from the study area, only to return in small numbers in early March, with the end of the hard weather.

1956-1957

The first arrivals, six birds, this year were rather later, on October 27th, although birds had been reported in flight over the district two weeks before this date. Numbers built up to a peak of 235 on December 22nd, and although there is a figure of 124 for January 5th, this does not in fact represent the total for the farm that day as circumstances prevented one flock from being counted. It therefore seems that the figure of 271 on January 19th represents a continuation of the build-up. A slight scattering

of snow on January 15th gave rise to the state of the ground being at "8", but this is not reflected in the bird-numbers, possibly because the effects of the hard weather were soon dispersed by warmer conditions. The fall to zero on February 9th is again probably explained in terms of an inadequate cover by the censuses, as not all the farm was visited. The last birds were seen on April 6th, and the overall decline had been gradual. In fact, the two irregularities in the basic pattern for this season are probably to be explained in terms of human error, and although the snow of January 15th may have had some effect, this is lost in the graph due to its falling between counts. In general, the season was marked by an absence of prolonged hard conditions.

1957-1958

This season was notable for its low figures, the first record, of a solitary bird, being on October 20th and the maximum, on January 18th, being 118. There was a hard spell during January, with temperatures falling as low as 16°F, but no marked decline in Lapwing numbers was recorded on this occasion. It is, however, significant, if unfortunate, that no counts were made during the actual period of hard weather, and thus it seems probable, by comparison with other hard spells, that some fall in numbers did take place, but that with the return of warmer conditions, numbers were again building up at the time of the next visit. A sharp decline in March of the same year, however, did coincide with low temperatures.

1958-1959

From the first record of 34 birds on September 26th, there was a more or less gradual rise in Lapwing numbers until November 8th, when 102 birds were recorded. It is interesting to note that on this day temperatures had fallen to below freezing, and the observers recorded the Lapwings as being extremely disturbed. Temperatures rose again the following day, however, and although there was a small fall in numbers, this was temporary, and the general pattern was of a continued build-up until a maximum of 215 birds was recorded on December 26th. It is perhaps possible to read too great a significance into the agitated behaviour of the birds on November 8th. Although it is possible that the cause of disturbance in this case was the low temperature, the B.T.O. survey recorded a number of similar incidents, many of them in October. M. D. Lister has suggested that such restlessness is possibly connected with movement, and is possibly akin to *Zugunruhe*, or pre-migratory restlessness, in caged migrants.

A much prolonged period of hard conditions in early January led to the birds' deserting Pinner Park; they returned only with the resumption of warmer weather at the end of February.

1959-1960

The pattern of this season was of interest for another reason besides numerical fluctuations associated with low temperatures. The first record was on September 21st, when 30 birds were noted, but by October

4th, the number had fallen to zero. During this time, the land was suffering the consequence of a prolonged drought, and the hardness of the ground ("O") may well have caused the absence of the Lapwings from the area. At all events, it is a remarkable coincidence that, on October 10th, rain fell, breaking the drought, and that Lapwings were again recorded in Pinner Park on the following day. Following this, the numbers built up to a peak of 201 on December 26th, a sharp decline during the first two weeks of January coinciding with a period of cold weather; a temporary rise at the end of February coincided with warmer conditions.

1960-1961

Although there were some fluctuations in flock-size during this season, there was no occasion recorded on which all the birds left the area. It was in fact a "peak year", with numbers rising to a maximum of 470+ in the middle of February. This was an unusually mild winter, with only four days upon which minimum temperatures fell below freezing.

1961-1962

The first record, of four birds, was on October 1st, and from this date there was a steady increase until a peak of 114 on November 19th. Graphic fluctuations between these two dates are probably at least partly due to foggy conditions, which hampered recording. On October 15th, for example, visibility was below 100 yards, and the birds were very disturbed: the disturbance, however, suggests that the numerical fluctuations at this time may partly reflect local movement (see above). A second peak, and the maximum for the year, of 169 birds on December 10th coincided with a maximum temperature of 58°F on the same day. Thereafter there was a sharp fall in temperatures, and the birds had vacated the area by the end of the year. By the time of their return on January 9th, the cold spell had broken, although another decline in late February again coincided with hard conditions.

1962-1963

This was the last full counting season; the first record, of four birds, made on October 1st. A decline in numbers in early December again coincided with hard weather. The most spectacular fall, however, was at the end of December, when the onset of the extremely cold conditions for which that winter was noted led, not unexpectedly, to the total disappearance of the wintering Lapwing flocks from Pinner Park.

Discussion of overall fluctuations

The foregoing brief descriptions of the fluctuations in the size of the Lapwing flock in each season, illustrated in Figs. iii and iv, suggest a close relationship between weather conditions, particularly the state of the ground, and flock numbers. Spencer (1953) has pointed out that prolonged spells of hard frost are liable to cut off the Lapwing's supply of food. Recent investigations have shown that Lapwings, by comparison

FIG. III

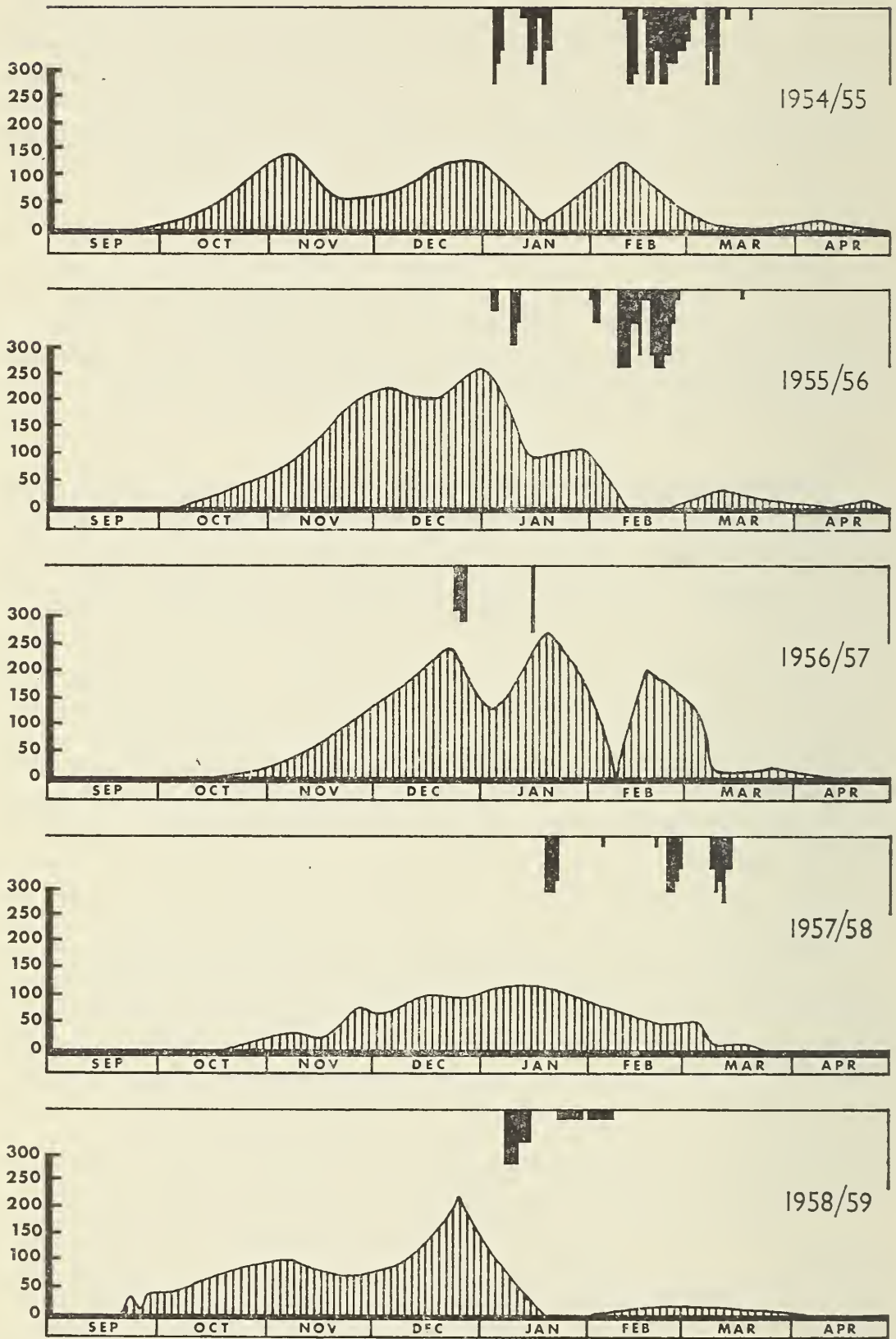
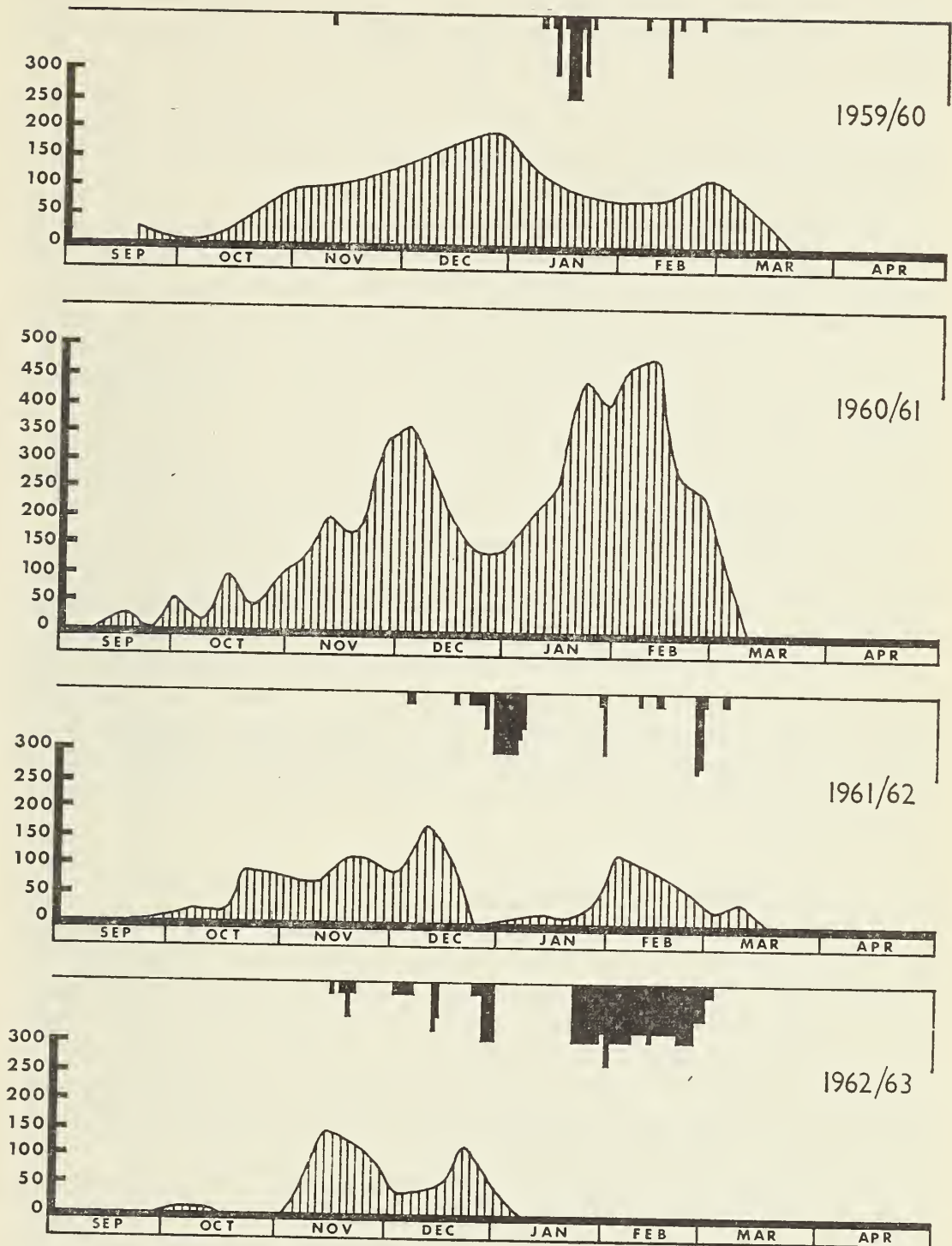


FIG. IV



FIGS. III AND IV. WINTERING LAPWING NUMBERS AND INCIDENCE OF HARD DAYS

Time is expressed in the horizontal axis; the numbers of birds in the left hand vertical axis. The state of the ground is recorded in the right hand vertical axis, only occasions when the ground was at "3" or over (see Table 1) being shown on the graph.

with Golden Plover (*Charadrius apricarius*), take high amounts of insect larvae; in order to obtain their food, the birds tend to "gape", i.e.: thrust their bills into the ground and open it to excavate, and thereby grasp their prey. It is obvious that this method of feeding will be hampered when the state of the ground is hard, whether this be due to freezing or conditions of drought. In this sense, the Pinner Park data does no more than demonstrate in some detail a pattern of winter movements which has previously been noted by other workers (e.g.: Nicholson, 1938-39) and which, in view of the diet of the birds, is to be expected.

It is interesting to compare the results of the present study with those of Lister (1939) for a 225 acre Surrey farm in the period immediately before the 1939-1945 war. Lister's farm near Epsom was in many ways comparable to Pinner Park: in altitude it was 200-300 feet and was, at the time of his work, "just outside the present tidemark of concentrated building"; also, it was "the chief gathering ground of Lapwings for some distance around". The Surrey farm did, however, have a chalky subsoil, as opposed to the London Clay of Pinner Park, and had no trees or hedges, save for a low perimeter hedge. In other respects, such as the proximity of roads, railways and footpaths, the two farms are similar.

Unlike Pinner Park at the present time, Lister's farm retained a small breeding population of 6-8 pairs of birds. The build-up in Lapwing numbers in June or July which was a feature in Surrey, however, was not noted at Pinner, and the September climax at Epsom, which Lister suggests as possibly being connected with the autumn migration, was absent from the Middlesex farm. (A build-up in Lapwing numbers in the July-August period was noted elsewhere in the North West Middlesex area, however—see below). Nonetheless, the general pattern of flock-size for the period October-March on the Epsom farm corresponds closely to that at Pinner Park.

Flock Distribution and Land-Use at Pinner Park

During the period of study, a record was made of the distribution of the birds on the farm in relation to a broad classification of the fields into "arable" and "pasture". Arable land was taken to include fields under such crops as kale or winter wheat, where a large expanse of bare earth was in evidence. "Grass" was interpreted to include permanent ley and rough pasture, though waste ground and allotments were placed in separate categories. In fact, no Lapwings were recorded on the allotments or waste areas, but there was a general preference for the birds to be on the ploughed fields, and this observation confirms those of other workers (e.g.: London Natural History Society, 1964).

The shift of flocks from pasture to plough and vice-versa throughout the winter was haphazard, and no general pattern emerges from the figures. Certainly, there is no apparent correspondence with any particular type of weather conditions, and on many occasions the flock was widely scattered over fields of all types. In common with other observers, the present writers found nothing to suggest that cattle either attracted or repelled Lapwings from the particular fields in which they were pastured.

Certain fields, over the years, seemed to be particularly attractive to the birds, and in general these were the larger ones. One field in particular, however, on the slopes of Nower Hill (Field 2 on map), was rough pasture until 1960, and in this condition Lapwings were never recorded on it; in the autumn of 1960, it was ploughed, and in the following season the birds were regularly noted feeding there.

Russell (1957) has pointed out that the population-density of soil fauna is higher in rough grassland than in other types of agricultural land, and Macfadyen (1962) says that in most rough grassland soils the fauna is concentrated near the surface. Soil fauna, notably *Elaterid* beetle larvae and *Agrostis* caterpillars, form a high percentage of the diet of the Lapwing, and thus one may assume that the ploughing of this old pasture exposed large food supplies which attracted the birds to the field. The relative attractiveness of this particular field, however, seemed to have ended by the following season.

P. Burton (personal communication—1965) has suggested that Lapwings rely to a large extent on sight for locating their prey, although vibration receptors in the epidermis of the feet and legs are also important. It is therefore reasonable to assume that the birds will find it convenient to feed on ploughed fields where there is no grass to obscure their vision, and this would explain the birds' overall preference for arable land (including both "bare" plough and fields under young wheat or kale) which was evident from observations at Pinner Park.

Lapwing Distribution in Relation to Field Size

Although Lapwings were at some time recorded on almost every field at Pinner Park, as has already been suggested, the birds showed a clear preference for the larger fields. This was particularly the case when the birds were gathered into a flock, rather than scattered over the farm in general; fields which were particularly favoured were 8 and 12, and to a lesser extent, 4 and 21. There is probably no need to look for any more elaborate reason for this than it is difficult for some 200 birds flying in loose formation to settle in a one or two acre field surrounded by hedges and tall trees. It is, in fact, obvious that flocks of a relatively large bird such as the Lapwing are going to be found in more open areas. Spencer (1953) states that Lapwings avoid fields cramped in by hedgerows, but at Pinner it would be more true to say that large numbers of the birds tended to be found in the larger fields. In this respect, the present writers' findings are in agreement with those of Dr. G. Allsop, who, in submitting the Cornish returns to the recent Lapwing Inquiry of the British Trust for Ornithology, stated that field size did not appear to be of great importance in his part of the country. Other observers taking part in the same inquiry, however, said that the Lapwings showed a preference for larger fields.

The present writers admit that large flocks of Lapwings tend to be found in larger fields and on more "open" areas such as aerodromes (see below), and yet the exact nature of this preference may well be related to the birds in flocks, rather than as individuals. Indeed, records of Lapwings

flying at hedge height in strong winds, and of individual birds sheltering in the lee of hedges, suggests that this general picture of preference for open areas is one which requires qualification.

Fig. V illustrates the size of Lapwing groups in relation to field size at Pinner Park.

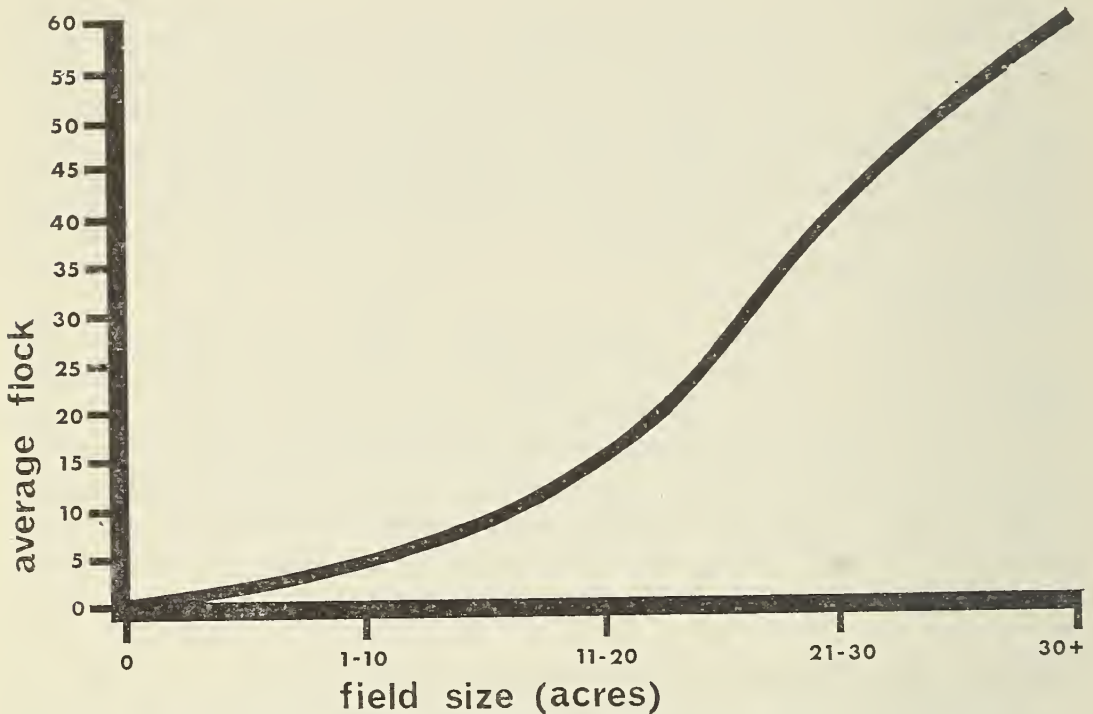


FIG. V. AVERAGE LAPWING FLOCK IN RELATION TO FIELD SIZE.

Pinner Park compared with other areas in North West Middlesex

Northolt Airport lies some four miles to the south west of Pinner Park, and is notable as a locality for a small breeding population (four or five pairs) and wintering flocks of Lapwings. Although it was possible to obtain sporadic records from Northolt from September 1956 until December 1959, these counts were very irregular, and the results afford no real basis for comparison between that area and Pinner Park. What was evident, however, was that, in addition to its small breeding population, Northolt seemed to have a much larger wintering flock than that which was present at Pinner Park. Northolt is, of course, a much larger area than the Park, and also provides the birds with a very different type of habitat. The Lapwings at the Airport tend to favour the grass areas between the runways. It is also true to say that Northolt is in effect less disturbed than Pinner Park, the presence of aircraft and the noise associated with them being such a regular feature, and not associated with any danger to the birds, that it need not be considered from this point of view.

One feature of the Northolt Lapwing population which emerges from the three years' records which are available, is the presence of a late summer flock, similar to that noted by Lister at Epsom before the Second

World War. As has already been stated, this is a feature which was absent from Pinner Park. In the one year in which it is possible, on the basis of the figures, to suggest a comparison between the two areas (1957-1958), it is evident that the wintering flocks at Northolt attained their maximum some two weeks after those at Pinner Park. At the end of the winter, too, the decline in numbers at Northolt was much steeper. Basically, however, the overall pattern in the two localities was similar, but on such scant evidence one cannot justify drawing any conclusions from this.

Northolt apart, it has not been possible to obtain regular Lapwing records from elsewhere in North West Middlesex. There are, however, a large number of casual records from many observers, and a high percentage of these are from the Colne Valley, an area of flooded gravel workings with small islands set in low-lying agricultural land in the flood-plain of the River Colne. The Colne Valley at its nearest point lies about six miles west of Pinner Park, and it has been suggested in the past that the frequency with which waders of various species, including Lapwings, are recorded there in the late summer and winter months, is a reflection of its status as a migration route. What seems more likely, however, especially in light of recent indications that many species migrate on a wide front, is that the Valley draws such birds because of its suitability as a feeding-ground.

Flocks of fifty or more Lapwings are a not uncommon feature in the Colne Valley during the months in which Lister recorded his July and August build-up at Epsom, and these scattered figures suggest that it is at this time that migration is reflected in North West Middlesex. Specific localities within the Valley are especially favoured by the birds at this time of the year: one particular example of this is the Maple Cross Sewage Works, at West Hyde.

The other time of year in which the Colne Valley will attract numbers of Lapwing is during the winter months. Small numbers of wintering birds are usually recorded along the Valley, and it is not uncommon for a period of hard weather to be accompanied by a marked rise in the numbers of birds in the Valley. For example, large numbers of Lapwings recorded in the Valley in February 1959, coincided with the disappearance of the birds from Pinner Park during a period of hard weather, and although records from the Colne are not as complete as one would wish, the indication is that the area gathers birds from the surrounding agricultural districts when the normal wintering grounds are rendered unsuitable by frost or snow-cover. In prolonged periods of extremely hard weather, however, such as the winter of 1962-1963, when even the Valley is rendered unsuitable, there is a total exodus from the North West Middlesex area. It is probable that the wintering flocks from Pinner Park are drawn into this general pattern.

One of the strange features of the wintering flock at Pinner Park is the fact that the Lapwings are to be found on this isolated agricultural area, surrounded by suburban housing, whilst the species does not frequent similar farmland areas to the north and north east. For instance, half a mile to the north east of Pinner Park lies Harrow Weald Park (see above), an area of mixed farmland similar to the study area in every respect. Yet

Lapwings have been recorded on Harrow Weald Park only three times since 1949, and then for odd days only. Another area of farmland about three quarters of a mile to the north of Pinner Park is equally lacking in the presence of Lapwings, and the same is true for other agricultural areas in North West Middlesex. Occasional wintering flocks are recorded on the Harrow School fields, some two and a half miles to the south of the study area, but it would be true to say that the Pinner Park birds are the only regular wintering Lapwing flock on agricultural land in that area of Middlesex which lies to the north of a line drawn from Elstree to Uxbridge. This same area contains much of the remaining agricultural land within the County and, superficially at least, much of it is suitable for Lapwings.

Pattern of Movements in N.W. Middlesex and S.W. Hertfordshire

A total of 170 casual observations of Lapwing flights and flockings in the general area of North West Middlesex and South West Hertfordshire have been obtained: from these, a broad pattern is discernible. Although movements have been recorded in every direction, the bulk of records for all times of the year are of flight in a W. or S.W. direction.

Many of the flight records are for the months of June and July, and these movements conform to the late summer migration which has already been mentioned, and are probably related to the influx of birds in the Colne Valley and at Northolt at this time of the year.

Glegg (1929) records the autumnal east-west movements of Lapwings in the London area, and Fitter and Homes (1938) noted the association of south-westerly flights with the occurrence of hard weather. Many of the records submitted to the present writers conform to this same pattern, and many observations were of birds flying in a generally westerly direction at the onset of cold conditions; records of unusually high numbers, such as were recorded in the Colne Valley on February 15th, 1959, seem to fit into this general pattern (see above).

Some records of large numbers, however, do not fit into the pattern suggested above. One example of such a record is that of the 2,000 Lapwings recorded at Northolt on February 18th, 1957, in a month when no "hard conditions" were noted at Pinner Park. Such exceptions to the general rule may possibly be explained by hard conditions elsewhere in the country, causing an influx of birds into the North West Middlesex area.

February movements, although initially towards the south and south-west, show an increasingly north and north-easterly trend as the month progresses, and this is continued into March, although by the end of that month the movement has ceased. These flights probably represent a return to the breeding grounds, and it seems likely that the Pinner flocks are drawn into this pattern.

A tentative correlation with the records for Pinner Park suggests that southerly flights in autumn are often associated with a fall in the size of the local flock, whilst westerly flights at the same time of year are often accompanied by a rise in the number of Pinner birds. Southerly flights in spring are usually accompanied by a rise in the number of local birds,

whereas northerly flights at the same time of year are normally accompanied by a decline.

General Discussion

To some extent, in the period prior to 1914, building had been avoided on the London Clay, partly because of the constructional problems which this entailed prior to main drainage (Johnson, 1964). The greatest area expansion of London took place between 1918 and 1939, when the built-up area virtually doubled (Coppock, 1964); this development was most dramatic in Middlesex.

There can be no doubt that the decline of the Lapwing in North West Middlesex must be set against and explained in terms of this urban growth. Although the species has shown a stability within the country as a whole, its decline in North West Middlesex is largely the consequence of habitat destruction.

The close relationship between the size of the flock and the state of the ground which is demonstrated by the figures for Pinner Park confirms the more generalized observations which have been made in the past. It has not been practicable, in the course of this work, to analyse the food of the Lapwings at Pinner, but reference to work carried out elsewhere on the food-sources of the birds suggests that it is the nature of the Lapwing's diet which determines this close control of numbers by weather conditions.

Feeding habits, again, probably determine the birds' preference for ploughed land, but certain aspects of the flocking pattern as seen at Pinner Park evade so simple an answer. It has already been suggested that field-size is of limited significance, but the preference shown by the flocks for certain fields as against others is less easy to explain. Fields 4, 8 and 12, however, which were all favoured by the birds, are low-lying. Field 8, in fact, is known as "Rush Field", which is indicative of its damp nature. A number of observers submitting evidence to the British Trust for Ornithology's inquiry found that Lapwings had a preference for damp areas, and the advantage of this to a species with the Lapwing's feeding-methods is obvious, although the preference may also be explicable more directly in terms of food.

In many respects Pinner Park is a typical area of farmland in North West Middlesex: it is typical both of large areas which have disappeared, and of those which remain. Yet the Pinner Lapwing flock is essentially the total wintering population on agricultural land in the whole of North West Middlesex. Past records testify that wintering Lapwings have long been a feature of the area, but there is little evidence of the rate at which these flocks declined. Past issues of the *London Bird Report* either ignore the species altogether, or else note "freak" appearances in the Central Parks or, increasingly of recent years, hard weather movements. But the general decline of the Lapwing in North West Middlesex has largely gone unrecorded, and the Pinner flock is a remnant of what was, clearly, once a far greater wintering population.

Movements of Lapwings in North West Middlesex are, however, still notable, especially in late summer and during periods of hard weather

in the winter months. For some reason, the Pinner Park population does not seem to be affected by the June and July movements, although it is clearly tied to winter movements in periods of intense cold. The exact nature of the relationship of this small population to these larger movements is far from clear, but would repay closer investigation.

During the period of this study, the Lapwing population at Pinner Park has shown no tendency to decline, yet it is obviously in many ways a relict population, and as such is in danger of extinction. To explain the species' disappearance from large parts of the London Area one need look for no reason other than habitat destruction. Yet the birds are today absent from many areas close to and similar to Pinner Park, and seemingly suitable for the species. Changes in land-use and increasing human disturbance are obviously likely to be the greatest threats to the continued existence of the Pinner flocks. Presumably there are other, more complex, factors to be considered. Until our understanding of the species' ecology is greater, they must remain speculative.

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The Bird Life of Bishop's Park, Fulham, and its vicinity

By P. J. STRANGEMAN

Introduction

One of the most important single advances in our knowledge of London's ornithology has been the result of highly intensive studies in several central London localities. In particular the studies of Regent's Park and Primrose Hill (Wallace, 1961) and Holland Park (Brown, 1963 and 1964) have shown the variety of birds to be found in Inner London.

In September 1957, in Bishop's Park, Fulham, which I pass through almost every day I was excited by the presence of two Tawny Owls and since then I have kept notes on the birds of this locality. A little knowledge of visible migration over the park was gained from a number of migration watches in 1960. Similar watches over Regent's Park and Primrose Hill in 1951, 1952 and 1958 had prompted Wallace's full year's study of the area in 1959. Stimulated by his work in Inner London, I began a similar study in Fulham in 1962 with the main aim of studying migration through Bishop's Park and its vicinity. This paper outlines the results so far obtained, including some earlier records, and covers the period from September 1957 to December 1964.

Description of Study Area

Bishop's Park is situated in the south west of the former Metropolitan Borough of Fulham (now part of the London Borough of Hammersmith), overlooking the River Thames near Putney Bridge. For over 1,200 years this land was owned by the Bishops of London. At the end of the 19th century 12 acres of parkland was open to the public and by the early 1930's the Ecclesiastical Commissioners had handed over further extensions of this area to the Fulham District Board of Works.

The study area can be divided into three definite sections; Bishop's Park, a Residential Area and the River Thames. Details of the area as it was in 1964 are shown on the accompanying map.

Bishop's Park can be sub-divided into four main areas; recreation ground, churchyard, allotment gardens and Fulham Palace Grounds. The most recent changes have occurred in the recreation ground which covers an area of 30 acres, most of which is open to the public from 7.30 a.m. to dusk. Privet hedges formerly existed underneath the plane trees along the riverside walk but these have now been replaced by small shrubs. Fielders' Meadow, now a playing field, was occupied by allotment holders during the Second World War and until the late 1950's laurels and privets were to be found on the western, northern and eastern slopes. The paddling pool is filled with water between May and September. All



The residential area is represented by hatching (terraced houses with gardens) and cross hatching (other premises); solid black areas indicate buildings in the park; broken lines show main footpaths; dots indicate the positions of trees and where close together woodland (ivy is the dominant ground layer beneath the elms and sycamores); lines with crosses show hedges (privet); stippling indicates shrubs.

Saints' 15th century church stands in 2.3 acres of churchyard which separates the tiny Vicarage Garden from the recreation ground. Yew is dominant and holly and lime are found in this churchyard. A proposed swimming pool is expected to encroach on to the allotments, 16.8 acres of ground where St. Mark's School (2 acres) already covers the northern corner of this land. In October 1964, a coppice in the southerly corner of the allotments was felled. This land has now been ploughed together with an adjoining field, which was once an orchard, to compensate for the gardens lost to the proposed development. Fulham Palace Grounds (hereafter called "the grounds") is 13.8 acres in extent. Unlike the recreation ground which is open to the public, the grounds are private. The woodland where elms and sycamores are co-dominant is an important habitat in the park, especially for breeding species.

The Residential Area consists mainly of rows of terraced houses with small adjoining gardens. Fulham Football Ground and Gilliatt School are also included in this area.

The River Thames flows N.W./S.E. in this stretch of the river and has Barn Elms Park and boat houses on the opposite bank.

Unfortunately there are very few reliable past records from the park for comparison. Herons and possibly Spoonbills nested on old trees in the Bishop of London's Grounds in Henry VIII's day. "Birds in London" (Hudson, 1898) describes Bishop's Park as one of London's rare beauty spots where Wrens, thrushes, Blackbirds, Robins, Hedge Sparrows, Chaffinches and a few summer visitants could be heard singing and where Woodpigeons nested.

Writing in the *Fulham Chronicle* in the 1950's "Birdman" gives some interesting records, but due to certain statements such as one concerning Common Terns (summer visitors to the British Isles) "flitting up and down the river" in winter, I have ignored all these observations to avoid un-authentic records appearing in this paper.

Method and Aim of Study

The northern boundary of the study area, chosen to include the author's garden in Greswell Street and Fulham Football Ground, and the other boundaries of the area, all clearly defined features, are shown on the map.

Little intensive work has been carried out in the built up area, but as I pass through it almost daily, records have been kept of all except the commonest species and the records for the residential area are based upon these. On most visits to the park, my route included the river walk, from which observations of species on the Thames were made.

I pass through the length of the park on most days and the records before 1960 were almost all confined to this somewhat random method of observation. The woodland is easily seen from the recreation ground and churchyard, and the most interesting records, of leaf warblers, in the early period come from this part of the park.

In 1964, a breeding season census was carried out based mainly on the method adopted by the British Trust for Ornithology in the "Common Birds Census". Two full winter counts were made in the same year. In the springs and autumns of 1963 and 1964, observations were concentrated on censusing nocturnal migrants using a similar method to that described by Wallace (1961) in Regent's Park. My method differed because no map was used, but the positions of migrants were recorded in written form. Migrants in the pond area were counted on all days when Bishop's Park was visited and if sufficient time was available other areas were censused. Details of the observations of visible migration between 1960-64 are given in that section.

The intensity of the observations in recent years can be seen from the fact that the park was visited on 316 days in 1962, 338 in 1963 and 331 in 1964.

Breeding Population

Cramp and Teagle (1952) remark on the woodland character of the grounds of Holland House and stress that this habitat serves as a sanctuary for bird life in Inner London. Wallace (1961) draws the attention of future observers in Regent's Park to "the officially designated bird sanctuaries" and points out that together with Primrose Hill it is "probably the most natural of the artificial habitats in Inner London, excepting the woods of Holland Park". These descriptions of parts of two Inner London parks emphasize the importance of the woodland habitat as a refuge for birds in the metropolis and should be remembered when the breeding species of Bishop's Park are considered.

During the period 1958-64, eighteen species are known to have nested including the seven species noted by Hudson. Unfortunately, no breeding census was attempted until 1964, consequently no comparison for all the species is possible. Only isolated nesting records of the less abundant species, e.g. Jay and Mistle Thrush, are available for earlier years.

Table I shows the 1964 results in which sixteen species bred or were believed to have bred. Ten species were censused by recording the positions of singing males and of the minimum of 119 territories located, 59 (50%) occupied all or part of the woodland. One Mallard's nest was found in the woodland and two pairs of Jays probably nested in this habitat. The Carrion Crow was the only species not nesting in the woodland. Although no figures are available for Woodpigeon, Starling and House Sparrow nests were found throughout the park including the woodland.

It is interesting to note that the distribution of the 35 singing male Hedge Sparrows was spread fairly evenly through all the possible nesting sites, and also that a territory was held outside the park in 1963 and two territories in the residential area in 1964. Could it be that the Hedge Sparrow has reached a peak in the park and is spreading into the surrounding gardens?

The ratio of Song Thrushes: Blackbirds was almost 1:3 there being 10:29 located territories. Only two Song Thrushes' nests were found in the recreation ground compared with the more even distribution of Blackbirds' nests. These two species' nests are easily found and in the case of the Blackbird are more susceptible to interference by small boys than any other species; in this sense man is a serious predator.

A pair of Greenfinches was found breeding in a laurel bush surrounding the cricket pitch in 1958, but the nest and eggs were destroyed. Although the shrubbery in which the laurel was situated has been replaced by grass the Greenfinch is now found in increasing numbers in other areas of the park; possibly five to six pairs in 1963 and 9-12 in 1964. This species is increasing in all London urban areas.

Brown (1963) writing on Carrion Crows in Holland Park states that this is "a long ranging bird and may well have bred in neighbouring squares and parks". In 1962 one pair nested in a plane tree near St. Ethelreda's church and other supporting evidence for her statement comes from nesting records outside the area in Lillie Road Recreation Ground, Fulham, and Barn Elms Park.

Cramp and Teagle (1952) stated that Mistle Thrush "nests are often in remarkably public places" in the grounds of Holland House and Kensington Gardens area. A similar description of this species in the park would be apt for all of the nests that have been built in sycamores or London planes were situated over a main footpath used daily by the public. Perhaps it is worthwhile mentioning that the footpath adjoins the woodland and may be a factor influencing the positions of the nests.

TABLE I
BREEDING CENSUS IN BISHOP'S PARK, FULHAM, LATE MARCH-MID JUNE, 1964

<i>Species</i>	<i>No. of pairs</i>	<i>Census Method</i>
Mallard	1	a
Woodpigeon	?	a
Carrion Crow	1	a
Jay	2	c
Great Tit	5	b
Blue Tit	7	ab
Wren	6	b
Mistle Thrush	1	ab
Song Thrush	10	ab
Blackbird	29	ab
Robin	14	b
Hedge Sparrow	35	ab
Starling	?	a
Greenfinch	9-12	b
Chaffinch	3- 5	b
House Sparrow	?	a

TOTAL (13 species) 123-128

a — nests found

b — singing males

c — sight records only

Winter Population

Although records of winter species have been kept since 1957, no full count was made in the park until 1964. The first count, in January, was spread over two days, 18th and 19th, and the second was made on December 12th. Despite the January count being spread over two days the total was considered to show very little error. It is, of course, premature to draw conclusions from the results, shown in Table II, but it may be worthwhile summarizing some points.

In January 965 birds of 17 species were found compared with 539 birds of 16 species in December. Of 15 species recorded on both counts only three showed a higher figure on the second count of which the Blackbird differed by 26, from 76 to 102. The largest change was found in the House Sparrow which decreased from 591 to 223. Fewer than 100 birds of all other individual species were present on both counts and only the Starling exceeded 50.

TABLE II

WINTER POPULATION IN BISHOP'S PARK, FULHAM, 1964		
<i>Species</i>	<i>Jan. 18th/19th</i>	<i>Dec. 12th</i>
Woodpigeon	48	34
Tawny Owl		1
Carrion Crow	26	14
Jay	5	3
Great Tit	6	5
Blue Tit	31	17
Wren	1	2
Mistle Thrush	3	
Song Thrush	12	5
Blackbird	76	102
Robin	15	4
Hedge Sparrow	32	18
Pied Wagtail	3	
Starling	92	77
Greenfinch	16	13
Goldfinch	1	18
Chaffinch	7	3
House Sparrow	591	223
TOTAL	965	539

These counts did not include the kitchen garden (2.3 acres)

The attention of future observers is drawn to the stretch of river near Fulham Football Ground, especially when the foreshore is exposed at low tide, where ten species of ducks have been seen in winter. Mallard, Gadwall and Wigeon are regular winter visitors to Barn Elms Reservoirs, Surrey and it is parts of these flocks of dabbling ducks which are most frequently found in the above mentioned area. Mallard are seen on all stretches of the river, but the other two ducks are more or less confined to near Fulham Football Ground. Gadwall and Wigeon are more easily disturbed by humans than Mallard and a reasonable explanation for their regular occurrence at this favoured spot is that this is the closest part of

the Thames to Barn Elms Reservoirs which is not directly approachable by the public. On numerous visits to Barn Elms Reservoirs the absence or low numbers of Mallard, Gadwall and Wigeon could be attributed to the presence of these species on the adjoining Thames. Further details of winter species are given in the systematic list.

Migration

NOCTURNAL.—The method used for censusing nocturnal migrants has been mentioned earlier. Prior to 1963, observations were confined to the pond area and woodland apart from monthly visits to the grounds in 1962 and odd visits to the allotments. At present there is too little data available to warrant a detailed discussion of the localized distribution of migrants in the park but from the information gathered in 1963 and 1964 it would seem that the following habitats are preferred.

1. The pond area, especially the willows, in spring and autumn.
2. The woodland in spring.
3. The allotments and grounds, in particular the kitchen garden and adjoining shrubberies, in autumn.

Only the results of 1963 and 1964, when a good sample of numbers of summer night migrants was obtained, are given in Table III and a summary of the passages in these years follows, together with certain simultaneous movements noted at the bird observatories (Davis 1963 and 1964).

Spring 1963:

The first migrant, a Blackcap, was noted on April 13th, followed by one *Phylloscopus* sp. next day. The next arrival, of seven *Phylloscopi* on 19th, proved to be the largest of the spring when simultaneous falls occurred at Dungeness, Regent's Park and Rye Meads. Ten birds were seen until early May when one or two occurred on six dates from 1st to 9th. No observations were made between 12th and 19th. Single Spotted Flycatchers appeared on 23rd and 26th.

Spring 1964:

A *Phylloscopus* sp. was the first migrant, on April 7th, followed by one or two on 9th and 13th to 17th. On the latter date the first good arrival of *Sylvia* warblers, including Blackcaps and Whitethroats, appeared at Dungeness and on 18th these two species were seen in the park. The peak period of passage took place between April 22nd and May 10th when migrants were present on every day, including a spring maximum of 12 (one Wheatear, one Blackcap, one Lesser Whitethroat, two *Sylvia* sp., five Willow Warblers and two *Phylloscopi*) on 30th. One Garden Warbler on May 12th and a Willow Warbler on 22nd were the last evidences of spring migration.

Autumn 1963:

Evidence of passage was noted on July 17th, one *Phylloscopus* sp., but the only other July records, also of *Phylloscopi*, refer to one on 26th, five

on 27th and one on 30th. A high total of 334 bird/days was recorded in August. No migrants were seen until 3rd, thereafter the daily total was only less than seven on two days and reached double figures on 18 days with a peak period of passage in the latter half of the month, 269 bird/days from 15th to 31st. The biggest arrival of the autumn occurred on 19th when two Whinchats, three Garden Warblers, two Whitethroats, one Lesser Whitethroat and 21 *Phylloscopi* (five definitely Willow Warblers) were present. Passage in the first half of September was on a reduced scale compared with August, only two sizeable arrivals, of Willow Warblers on 2nd and 15th, occurring. The only Redstart of the autumn was present on 4th. Observations were not possible from 16th to 28th and only Chiffchaffs, until October 4th, were seen after this date.

Autumn 1964:

The late July flush was prominent. One Garden Warbler was seen on 18th and Redstart, Chiffchaff and Willow Warbler had appeared before 25th when ten migrants were present. July 30th and 31st produced totals of 11 and 14 migrants, respectively, the latter being the peak total on any day in the whole autumn. Small numbers passed through in August and September, double figures (12) being recorded once (August 7th), Chiffchaffs occurred until October 11th.

Specific comments:

Table III shows a high total of 18 spring Blackcaps, 17 of which were seen in 1964. At the bird observatories, with local exceptions, overall numbers were not outstanding, but it is interesting to note from the Table of Abundance for Blackcap, Spring 1964 (Davis, 1964) that the only inland observatory, Regent's Park, had far more bird/days in 1964 (74) than in 1963 (4).

The low figures obtained for chats in autumn may be accounted for by the almost complete absence of evening visits at this season since Wallace (1964) remarks that "a sharp division between diurnal and nocturnal migration can no longer be upheld, particularly in the case of thrushes and chats . . . In three out of four years between 1959 and 1962, the heaviest autumn fall of Wheatears into Inner London occurred in daylight . . ."

Garden Warblers were the commonest *Sylvia* sp. in autumn being prominent in 1963 (20 bird/days) and 1964 (21).

Lesser Whitethroats have a localized migration through south east England and it should therefore be noted that the 11 bird/days (see Table III) in autumn refer to 1963, the species being conspicuously absent in 1964 even though Sandwich Bay (the "Lesser Whitethroat observatory") produced superlative numbers (Davis, 1965).

Willow Warblers and Chiffchaffs pass through in spring and autumn but many of these are specifically unidentified. Table IV shows the number and percentage of bird/days of Willow Warblers and/or Chiffchaffs in 1958/64. Numbers of identified *Phylloscopi* suggest a greater proportion to be Willow Warblers; the ratio of Willow Warblers: Chiffchaffs being 75:10 in spring and 25:10 in autumn.

TABLE III

MAKE-UP OF NIGHT MIGRANT POPULATION NOTED IN BISHOP'S PARK, FULHAM, 1963-1964

Species	Spring Bird/days		Autumn Bird/days		
	No.	%	No.	%	
Wheatear	3	3	3	*	
Whinchat			5	1	
Redstart			4	1	
Sedge Warbler	2	2	1	*	
Blackcap	18	17	7	1	} 14
Garden Warbler	2	2	41	5	
Whitethroat	7	7	34	5	
Lesser Whitethroat	1	1	11	2	
<i>Sylvia</i> sp.	4	4	10	1	} 78
Willow Warbler	34	32	183	24	
Chiffchaff	3	3	69	9	
<i>Phylloscopus</i> sp.	28	27	332	45	
Pied Flycatcher			4	1	
Spotted Flycatcher	2	2	37	5	
TOTAL	104	100	741	100	

* indicates below 0.5%.

TABLE IV

Phylloscopus Sp. IN BISHOP'S PARK, FULHAM, 1958-1964

Species	Spring Bird/days		Autumn Bird/days	
	No.	%	No.	%
Willow Warbler	45	52	229	32
Chiffchaff	6	7	95	14
<i>Phylloscopus</i> sp.	35	41	385	54
TOTAL	86	100	709	100

VISIBLE: Visible migration over the London Area has been described by Gibbs and Wallace (1961) and in *The Birds of the London Area* (1964). However, it is interesting to mention certain aspects of the movements which have been observed over the study area in relation to those seen elsewhere in the London Area.

Autumn visible migration watches were made in 1960 on 18 days from October 3rd to 28th and the park was one of the partially manned observation points (indicated on the map) during the first London Migration Watch (Gibbs and Wallace, 1961). Fuller coverage to the second London Migration Watch, from Fulham Football Ground, was given in 1962, when the observation point (marked on the map) was *not* manned on only three days, due to fog, in the 37 days period from October 6th to November 11th. Similar watches were made in 1961, 1963 and 1964 from the park. In the whole autumn periods, observations were made from July 18th (1963) to November 11th (1962) between 05.28 and 12.15 hours for a duration of fifteen minutes to three hours. Occasional watches were carried out in severe weather and all other incidental observations of migrating birds

have been included. The position of the 1962 watching point is considered to be the most suitable in the study area allowing unobstructed observations with few distractions.

In Table V, certain species of common autumn passage migrants are shown indicating their general directions of movement. Of course, the westerly passage of diurnal migrants is already known and the table shows that this characteristic direction of movement is evident over Fulham, and that birds do migrate in other directions. Starlings and Chaffinches are shown to be the two commonest migrants. However, the Woodpigeon is possibly commoner than either or both these species since there is considerable difficulty in separating migrant Woodpigeons from those which have roosted in Inner London and are returning to their feeding grounds, consequently migrant figures cannot be accurately assessed. It is interesting to note that birds arriving from the east and passing directly over Fielders' Meadow would alight on the playing field, in small parties not usually exceeding 20, to feed. At the slightest sight of man approaching them the flock would disperse into the adjoining plane trees, move to Barn Elms Park or fly off westwards. Other parties might arrive and those in the planes might descend to feed with them. Large flocks were rarely seen after 08.30 hours.

Several migrants are known to follow the course of the Thames and the area is therefore ideally situated for observing such movements. Table V shows that Swifts, Hirundines, Meadow Pipits and *Fringillidae* sp. (an isolated record) were seen to follow the Thames, but with the exception of Swifts which all followed the river, a higher percentage of birds moved in other directions.

Gull movements are of regular occurrence, but the status of many birds can only be described as "probable passage migrants". Movements which fall into this category have been observed from late July. In the mornings of 1962, on 23rd and 24th, Lesser Black-backed and Black-headed Gulls flying upstream deviated from the direct course of the river near Barn Elms Park flying low (up to *c.* 100 feet high) and alighted on the playing fields. From 27th to 30th these two species were definitely moving N.N.W. flying much higher and not landing in the park.

Roosting flights of Pied Wagtails, originating at Barn Elms Reservoirs, fly S.E. over the area shortly before dusk and *alba* Wagtails flying N.W. in the morning might be birds returning from a roost or passage migrants.

Visible passage is less obvious in spring. An interesting broadfront movement of Lapwings occurred on March 6th, 1963 and is perhaps worthy of note since birds were moving over Fulham at different heights and in various directions. Widespread northerly movements were reported throughout the London Area at this time. Although the majority of birds passing over the study area moved towards the northern half of the compass (74 E.N.E. and 35 W./N.N.W. between 07.35 and 08.45 hours G.M.T.) and only five flew S. and two S.W. the birds flying E.N.E. moved high and fast as opposed to those flying in other directions which flew low and tended to wander.

Details of other visible passage migrants are given in the systematic list.

TABLE V
 COUNTS OF CERTAIN DIURNAL AUTUMN MIGRANTS OVER BISHOP'S PARK,
 FULHAM, AND ITS VICINITY, 1957-1964

Species	Direction of flight						Total
	Following R. Thames		N./	E./	S./	W./	
	N.W.	S.E.	E.N.E.	S.S.E.	W.S.W.	N.N.W.	
Lapwing			17	10	121	61	209
Swift	2	12					14
Skylark			29	14	36	265	344
Hirundines	15	28	65	61	135	134	438
Meadow Pipit		3	6	25	29	83	146
<i>Anthus</i> sp.		10		4	26	20	60
Starling			73	127	123	7,566	7,889
Chaffinch			188	16	146	1,568	1,918
<i>Fringillidae</i> sp.		3	32	73	328	718	1,154
TOTAL (above species)	17	56	410	330	944	10,415	12,172

Periods of passage are given in the systematic list.

Lapwing figures include summer records, from June 15th.

Systematic List

All records refer to the study area between 1957 and 1964 unless otherwise stated. All times are G.M.T.

GREAT CRESTED GREBE

A winter visitor to the river during the severe weather in 1963, where up to three from January 12th to March 7th. Five flew N.N.W. following the northern bank of the Thames on March 28th, 1964.

LITTLE GREBE

One on the river on November 4th, 1962.

CORMORANT

A passage migrant, occurring once in January and February, twice in July, once in August and six times in October. Observed moving in eight various directions with maxima of two parties of seven flying W. and N. on October 12th, 1960.

HERON

An annual visitor seen irregularly from March to November, usually singly and in flight. Three on September 8th, 1961.

MALLARD

Present on the river throughout the year, increasing in winter. Usually seen in the park in summer; one or two in 1958, 1960 and 1961; breeding proved in 1962 to 1964, at least one and possibly three pairs in 1963.

TEAL

Up to eight on or over the river from September to January; three records in 1961 and seven in 1962.

GADWALL

A winter visitor most often occurring from October to February with a maximum of 23 on December 5th, 1963. March, August and September records are not unusual and there is one for April (5th, 1963), May (23rd, 1963) and July (29th, 1962).

WIGEON

A winter visitor, usually seen between October and February and not recorded after March (latest, 13th, 1964). Maxima of 23 on December 23rd, 1961, exceeded in the severe winter of 1962/63 with 61 on January 12th, 42 on February 1st and 45 on 3rd.

PINTAIL

Two drakes on the river on January 12th, 1963.

SHOVELER

One duck on the Thames on January 27th, 1963.

TUFTED DUCK

An annual visitor, occurring in every month, but most often in winter with largest numbers in hard weather. Usually seen on or over the river, where up to "hundreds" on January 1st and 2nd, 1962 and again from January to March, 1963, but up to six have been seen inside the park on four dates during the spring and summer.

POCHARD

Up to four from January to March and in August and September, usually seen on or over the river.

GOLDENEYE

All seen on the river; one on November 10th, 1962 and October 27th, 1963, two on March 3rd and 4th, 1964.

GOOSANDER

Seen in flight only; one on January 17th, 1959, four on December 8th, 1961, 21 flying E. on March 18th and one on December 27th, 1963.

SHELDUCK

Recorded on the river only; one on October 29th and 30th, 1962, four on January 27th and February 2nd, one on March 7th and on four dates from November 2nd to 16th, 1963.

GREY LAG GOOSE

Three on the river on February 3rd, 1963.

CANADA GOOSE

Two or three seen in flight on May 10th, 1959 and on five dates from March 15th to April 20th, 1964.

MUTE SWAN

A non-breeding resident on the Thames and frequently seen in flight over other parts of the area.

KESTREL

Has bred twice and been recorded in every month. One pair bred on All Saint's Church and about 1962 a pair nested in the grounds, unfortunately the exact details are not known.

The number of dates on which this species occurred in each month is given below:

Jan.	Feb.	Mar.	Apr.	May	June
6	3	14	17	4	4
July	Aug.	Sept.	Oct.	Nov.	Dec.
21	24	14	15	6	7

The higher number of occurrences in March and April (Spring), and from July to October (Autumn) suggest passage migrants. However, possible breeding occurs near the study area and records in July and August may be partly due to their hunting movements.

MOORHEN

One in the park on April 16th and 19th, 1963 and December 27th, 1964.

COOT

A winter visitor to the river in hard weather in December, 1961, January, 1962 and January and February, 1963. Numbers described as "many" on January 1st, 1962, but up to ten on five other dates.

OYSTERCATCHER

One flew up the river on August 13th, 1964.

LAPWING

A passage migrant, and winter visitor in hard weather, observed in every month except May. Spring records fall between March 2nd (1962) and April 30th (1964). Late summer and autumn movements observed from June 15th (1959) to November 21st (1964) with a maximum of *c.* 100 flying S.W. on the latter date. Passage is most marked in October. Weather movements include 100 flying N. through E. to W. from 11.00 to 12.00 hours on December 30th, 1961 and one flock of *c.* 100 to W. on December 27th, 1964.

GOLDEN PLOVER

One flew W. on September 3rd, 1964.

SNIPE

One was flushed from the grounds on two dates in mid-November, 1964.

WOODCOCK

One flew N.N.W. on November 16th, 1961.

COMMON SANDPIPER

An autumn passage migrant from July 24th (1962) to September 16th (1961), usually seen singly on or near the river, but three on August 17th, 1964.

REDSHANK

An undated record of one in the park.

GREENSHANK

One flew up the Thames on July 12th, 1962 and one was calling over the park on August 11th, 1964.

GREAT BLACK-BACKED GULL

Probably passage migrant and winter visitor, occurring primarily on the river, but information is scanty.

LESSER BLACK-BACKED GULL

A passage migrant, prominent in autumn, movement possibly begins in the last week of July and migrants have been seen until November 4th (1962) when a maximum of 112 passed in three hours. All birds flew between W.N.W. and N.N.W. Two on May 9th and six on 18th, 1964 flying N.W. were possibly on spring passage. Up to five on six dates have occurred on the ground in the park from August 23rd (1961) to October 16th (1964).

HERRING GULL

A passage migrant and winter visitor.

In October, 1962, westerly movements were observed on 21st (3), 27th (1) and 29th (13). Common on the river in winter and *c.* 15 flying S.E. on January 1st, 1962, were associated with hard weather. One on Fielders' Meadow on February 2nd, 1960.

COMMON GULL

A passage migrant and winter visitor.

Visible passage noted in spring on May 9th (42 N.W.) and 18th (7 N.W.), 1962. Autumn passage possibly starts in late July, but only definite movement seen from October 27th (1962) to November 3rd (1962) with a maximum of 21 on November 2nd, 1962. All birds flew N.W. or W. Seen on Fielders' Meadow on January 13th, 1962 (8), March 7th, 1963 (4) and January 2nd, 1964 (1).

BLACK-HEADED GULL

A passage migrant and winter visitor.

Observations suggest autumn passage begins in mid-July (earliest, 18th, 1963) continuing to November (latest, 10th, 1962), but few movements in August and September. Maxima on July 30th, 1963 (53 N.N.W.) and October 6th, 1962 (39 N.W./N.N.W.). Seen on Fielders' Meadow from August 8th (1963) to March 7th (1963); maxima 65 on February 17th and *c.* 300 on December 14th, 1964.

BLACK TERN

One flew down the Thames on October 11th, 1960.

COMMON/ARCTIC TERN

On August 30th, 1961 two parties totalling nine birds flew up the river, followed by one next day. Eleven flew downstream on September 1st and one on 5th.

LITTLE TERN

One flew down the river on September 26th, 1962.

STOCK DOVE

Autumn passage migrants flew W./W.S.W. over Fulham Football Ground on October 15th (two), 21st (one) and November 5th (one), 1962.

WOODPIGEON

A resident and passage migrant.

Breeds regularly, but population unknown. Autumn passage observed from September, but dates of first movements difficult to define. Maximum of *c.* 1,400 flew W. over a *c.* 500 feet long front on November 27th, 1964, from 07.55 to 08.20 hours. Maximum on Fielders' Meadow; 160 on September 28th, 1961. On February 4th, 1964, 52 in the woodland area of the park alone compared with seven in the same habitat on January 18th/19th. Fluctuations were confirmed by nine further counts before February 16th; from two to 56 with a mean of 32.3.

TURTLE DOVE

A spring passage migrant in 1963 and 1964, one or two occurring on seven dates from April 18th (1964) to May 27th (1963). One on September 6th, 1964.

TAWNY OWL

Probably resident and has bred. On September 23rd, 1957, one was found roosting in the park and one or two were seen on many dates until October 27th, and on November 26th and December 2nd. They were seen at the same roost in 1958 and 1959, but were not recorded again until April, 1963, although odd birds were occasionally heard outside the park. A pair reared three owlets in 1963, but all the young and one adult were found dead in late April. One was heard in September 1963, February, July and October, 1964. One was located at a roost in the grounds on October 17th and on subsequent visits in November and December.

SWIFT

A non breeding summer visitor and passage migrant. The main arrivals are usually seen within four days of the first bird which usually appears in late April or early May (earliest, April 27th, 1959 and 1963). Seen overhead throughout the summer. Autumn passage recorded from July 22nd (1963) continuing in August, the last birds occurring in the second half of the month or in September (once; three on 3rd, 1960).

KINGFISHER

One in the park on September 22nd and 30th, 1961.

GREEN WOODPECKER

One in the park on August 19th, 1963, August 18th, and October 17th, 1964.

GREAT SPOTTED WOODPECKER

A passage migrant and irregular winter visitor. Two behaving as diurnal migrants came into the park and continued E. on November 4th, 1962. One flew N. on May 24th, 1963 and singletons on August 24th and 25th, 1964 and on three occasions in 1961 and 1964 between October 4th (1964) and December 27th (1961).

SKYLARK

A passage migrant, and winter visitor during or after hard weather. Spring migrants flew between W.S.W. and N. on March 16th, 17th and April 30th, 1963 and March 25th, 1964. Characteristic autumn movements noted from October 6th (1960 and 1962) to November 14th (1962); maximum 92 flying W./N.N.W. on October 22nd, 1961.

SWALLOW

A passage migrant, usually occurring singly in spring, between April 15th (1964) and May 29th (1964). Autumn passage noted from July in 1962 (27th) and 1964 (19th), but not recorded before mid August in other years, continuing to October (latest 19th, 1963); maximum 23 on September 3rd, 1963.

HOUSE MARTIN

A passage migrant, occurring in spring from April 12th (1963), with passage most prominent in May; six June records (latest, 23rd, 1964). Autumn passage recorded from July 15th (1963) to October 22nd (1961); maximum 12 on September 16th, 1961. Birds feeding or drifting overhead in mid or late summer probably refer to those from a breeding colony situated one mile N. of the study area.

SAND MARTIN

An autumn passage migrant occurring on eight dates (five in July) between July 22nd (1963) and October 4th (1958); maximum 17 on July 29th, 1962.

CARRION CROW

A resident, one or two pairs bred in most years. Largest concentrations in the park occur on Fielders' Meadow; maxima 61 on January 19th (also 29 on the adjoining Thames mud which they frequent at low tide and are joined by others from Barn Elms Park), 54 on February 2nd, 55 on March 7th and 40 on 8th, 1963 and 59 on March 16th, 1964. One flew S.E. at height on October 7th, 1962.

MAGPIE

One in the park in 1957, on March 11th, 1961 and September 17th, 1964.

JAY

Resident in the park. Bred in 1962 (two pairs) and 1963 (three) and up to three pairs probably nest annually. Never more than six seen together.

GREAT TIT

A resident. Only seen on five dates in 1959-60, but since 1961 this species has been recorded throughout the year and apparently nests regularly in the park. Outside the breeding season one or two have occurred in gardens from September 25th (1960) to March 24th (1959).

BLUE TIT

A resident and passage migrant. Breeds regularly in the park, but only one attempt to nest outside the park, in 1961. Up to six seen in gardens in all months, except June, but most frequent in winter. Visible passage observed in spring; three flew W. over the river on March 17th, 1963 and March 22nd, 1964 and three flew S. following the northern river bank on February 27th, 1964. Increases noted in August probably refer to post-breeding or autumn movements.

COAL TIT

A passage migrant or winter visitor or an irruptive species, occurring between August and March. One on five dates from October, 1957 to March, 1958 and on eight occasions between October and December, 1958 in a garden in Greswell Street. In the park; one on December 13th, 1959, up to *c.* 10 on seven dates from September 9th, 1961 to January 13th, 1962 and one or two on August 13th, October 27th and November 3rd, 1963 and November 8th, 1964.

LONG-TAILED TIT

An irruptive species in the autumns of 1960 and 1961. In 1960, 13 flew S. on October 2nd, seven plus on 24th, 12 on November 16th and *c.* 10 moving E. on December 10th. In 1961, seen in the park, five to seven on September 22nd, 28th and October 25th.

NUTHATCH

An irregular visitor, occurring singly in the park on February 27th, 1961, May 18th, 1963 and on ten dates from October 12th, 1963 to April 26th, 1964.

WREN

Resident in the park. Winter records of singletons in gardens on 13 dates from October 28th to March 9th in 1957-59.

MISTLE THRUSH

Breeds irregularly, passage migrant and winter visitor. One pair bred in the park in 1958, 1959 and 1964 and probably in 1961 and 1963. Visible movement observed in six directions between September 24th (1964) and November 12th (1963). Usually one or two occur irregularly outside the breeding season, but up to five noted.

FIELDFARE

A passage migrant and winter visitor. A N.W. movement on November 1st, 1959 and on December 4th, 1964, three flew W. Hard weather movements occurred on December 28th, 1961 (12 W.) and January 1st, 1962 (13 S.). Recorded in the park during severe weather, usually in small numbers and often singly, but 32 on February 26th, 1958.

SONG THRUSH

A resident and passage migrant. Breeds regularly in the park. Singing males are occasionally heard in the residential area, but no nests have been reported outside the park. Small numbers of visible migrants, flying generally W., have occurred between September 7th (1963) and October 12th (1963).

REDWING

A passage migrant and winter visitor. Most diurnal and all nocturnal migrants are recorded in October (earliest, 10th, 1963) when the biggest numbers are usually seen, but the largest movement, on a broadfront, was noted in November (1st, 1959). Weather movements in 1961-62 and 1962-63 included flocks up to *c.* 100 flying W. During severe weather several occur in the park and odd birds are occasionally seen in gardens. Maxima occurred in the park in 1963; 30 on January 10th, 35 on February 9th and 17th and 40 on 23rd. The latest was seen in 1964 (one flying N.W. on April 6th).

BLACKBIRD

A resident, breeding regularly in the park and gardens.

WHEATEAR

A passage migrant, usually occurring singly, in the park. Spring migrants seen on May 18th, 1963, April 30th and May 6th, 1964. Autumn passage recorded on seven dates from August 30th (1963) to October 13th (1962).

WHINCHAT

All seen in the park; one on April 27th, 1959, two on August 19th and one on 28th, September 3rd and 5th, 1963.

REDSTART

One in the park on September 4th, 1963, July 20th, September 8th and October 10th, 1964.

ROBIN

A resident, breeding regularly in the park. Single birds seen in gardens in the winters of 1957-58, 1959-60 and 1960-61 and a minimum of five singing located at the end of 1964.

SEDGE WARBLER

One in the park on May 8th, 1963, May 7th and July 25th, 1964.

BLACKCAP

A passage migrant, occurring in the park, usually seen singly, but up to three recorded. Spring migrants observed on April 13th, 1963 and on 12 dates from April 18th to May 9th, 1964. Autumn migrants were noted on August 5th, 8th and 10th, 1963, July 28th, September 5th and 8th, 1964.

GARDEN WARBLER

A passage migrant, usually seen singly, in the park. One on May 9th and 13th, 1964. Autumn passage recorded on 22 dates from July 18th (1964) to September 12th (1963).

WHITETHROAT

A passage migrant, up to four seen in the park. Spring passage recorded from April 18th (1964) to May 8th (1962). Autumn migrants noted between July 27th (1964) and Sept. 22nd (1962).

LESSER WHITETHROAT

Seen in the park; one or two on Aug. 4th, 19th, 21st to 26th and 29th and Sept. 7th, 1963 and one on Apr. 30th, 1964.

WILLOW WARBLER

A passage migrant. All *Phylloscopi* specifically identified as Willow Warblers have been seen in the park. Usually one or two, but up to five, were noted in spring between Apr. 6th (1961) and May 23rd (1959) with passage concentrated between mid-April and mid-May. Autumn passage begins in late July (earliest, 21st, 1964) and this species continues to be the prominent leaf warbler in August. There are 14 September records and one for October (4th, 1960).

CHIFFCHAFF

A passage migrant, recorded in the park. Up to three seen in spring between March 26th (1959) and May 16th (1960). July 20th (1964) is the earliest date of autumn passage and there is only one other record (August 11th, 1963) before mid-August. The Chiffchaff is the dominant leaf warbler from the last days of August to early October, during which period a maximum of six, on September 21st, 1964, was recorded. The latest date is October 11th, 1964.

GOLDCREST

Two on October 7th and one on December 10th, 1961 and October 15th, 1964, in the park.

SPOTTED FLYCATCHER

A passage migrant. One on May 23rd and 26th, 1963 were probably spring migrants, but one or two in late June and July, 1964 may not have been on passage since all were seen in the woodland—an ideal habitat for breeding. Up to three have been seen in autumn; August 15th, 1963 is the earliest August date, there are 19 records for September and two for October (latest, 2nd, 1961).

PIED FLYCATCHER

One on August 30th, September 20th and 23rd, 1962, September 4th, 1963 and August 24th to 26th, 1964, in the park.

HEDGE SPARROW

A resident, nesting regularly in the park and probably breeds in gardens where it has also occurred in winter. Unusually active and numerous birds were seen in mid-September and early October, 1964 and possibly refer to autumn or irruptive movements.

MEADOW PIPIT

A passage migrant, occurring from September (earliest, 9th, 1963), with peak passage in second half of month and October, until November (five records; latest, 11th, 1962). One on December 9th, 1961. Usually up to five, but maximum of 22 on October 14th, 1962. Has only occurred on the ground three times. In spring one flew W. on April 19th, 1963 and three to N. on March 26th, 1964. One floating on driftwood on the river on January 1st, 1962 was seen during hard weather.

PIED/WHITE WAGTAIL

An annual visitor, occurring in all months and seen frequently since 1961, prior to which there were only eight records from 1957-60. Visible migrants noted in small numbers on April 5th, 1963 and from August 11th (1963) to October 14th (1962). No White Wagtails have been identified.

GREY WAGTAIL

A passage migrant, one or two occurring regularly in September and October, 1959-63, in the park and on the Thames foreshore. Visible migrants flew S.W. on September 16th, 1961 (three), S. following the river on October 7th, 1962 (three), and S.W. on September 18th (two) and October 11th, 1964 (one). Recorded in November (four times), December (thrice) and January to March (once).

YELLOW WAGTAIL

Visible migrants seen on September 29th (three flying S.) and October 1st, 1961 (one S.W.), August 20th (one W.) and September 11th, 1964 (two W.). Two in the park on September 5th, 1964.

STARLING

A resident, breeding regularly. An unusual number, *c.* 250, in the morning of January 10th, 1963 were scattered on trees near Fielders' Meadow. Visible migrants were observed from October 5th (1961) to November 12th (1963) with a maximum of *c.* 1,150 flying W. on October 31st, 1962.

GREENFINCH

A resident and passage migrant. First seen in December, 1957 and bred in the park the following year. Now a well established resident, also observed in gardens in every month. Up to 20 are not unusually seen in the allotments in winter. Visible migrants were seen in October; 16th 1960 (one flying N.W.), 22nd (one W.) and 23rd, 1961 (one S.W.), 14th, 1962 (one W.), 12th (five W.N.W.) and 24th, 1963 (two W.).

GOLDFINCH

An annual visitor, first seen in September and October 1958, when up to 22 in gardens. Occurred in the park in April, 1959 and seen in every month by December, 1961. 172 records from 1959-64; November to March (20), April to June (44), July to October (108, suggesting post-breeding dispersal or autumn migration). Visible migrants flew S.W./N.W. from September 21st (1964) to October 31st (1962) with a maximum of 24 moving W.S.W. on October 3rd, 1963.

LINNET

A passage migrant and winter visitor. Visible migrants seen passing between E. through W. to N.N.W. from September 16th (1961) to November 1st (1961) with a maximum of 22 flying S.E. on the former date. All birds on the ground seen in the park; 10 on February 7th, 1960, nine on February 17th, 1962, one or two on three dates in January and October, 1963, one on January 17th and March 21st, up to six on nine dates from April 7th to May 2nd, two on October 26th and one on December 27th, 1964.

REDPOLL

One flew N. over Fulham Football Ground on October 13th, 1962 and one in the park on April 26th, 1964.

BULLFINCH

An irregular visitor in the park; one to three (four different birds) on January 13th, February 17th, March 8th and 20th, 1962, a female on 10 dates from August 19th to September 13th, December 1st and 14th, 1963 and March 21st, 1964.

CHAFFINCH

A resident, passage migrant and winter visitor. A few pairs breed regularly in the park. Visible migrants observed from October 1st (1961) to November 4th (1962) with maximum 311 flying W./W.N.W. on October 28th, 1962. Small numbers in the park during winter increasing in severe weather and usually noted in gardens at this time where a maximum of 8 occurred on January 25th, 1958.

BRAMBLING

Four on January 6th and nine on 12th, 1963, in the park.

HOUSE SPARROW

A resident, but little information available.

TREE SPARROW

An irregular visitor in the park; one or two on January 15th, February 17th and 20th, March 2nd and 6th and April 14th, 1962, one entered a hole in an ash tree in the allotments on June 9th, 1964. One flew W. on October 22nd, 1961 and one passed W.S.W. on October 31st, 1962.

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Book Reviews

THE BIRDS OF BERKSHIRE AND OXFORDSHIRE. M. C. Radford. *Longmans*, London, 1966. Price 42s.

Ornithologists have waited a long time for a comprehensive account of the birds of Berkshire and Oxfordshire. Clark-Kennedy's "Birds of Berks. and Bucks." was published in 1868. Oxfordshire's birds were fully described in O. V. Aplin's book in 1889. The most recent information was in W. B. Alexander's lists for Oxfordshire (1947) and for Berkshire (1952).

In Dr. Radford's work the two counties are taken together "primarily", it is stated, "because they constitute one convenient geographical unit—a large portion of the Thames Basin". A description of the topography of the region is followed by interesting essays on man's effect on the avifauna since primitive times and such characteristic areas as the Lambourn Downs, the Kennet Valley and Windsor Great Park and its neighbourhood. After the systematic list which fills the bulk of the book there are notes on ornithologists of the past, a bibliography, two sketch-maps and a gazetteer. There is also an attractive frontispiece of Stone Curlews by R. A. Richardson and nineteen plates, mostly illustrating types of habitat. The bibliography does not mention the Middle-Thames N.H. Society's annual bird report.

The systematic list for Berks. and Oxon. together includes 286 species of which 113 are regular or occasional breeders. In addition, Shelduck and Black Redstart have each bred once. Since the middle of the last century Little Bittern, Bittern, Kite, Marsh Harrier and Bearded Tit have become rare vagrants and the Dartford Warbler is described as a lost species. Additions have been Little Ringed Plover, Collared Dove and Black Redstart. Records appear to be complete to the end of 1964, though this is not stated.

The accounts of species describe their present status and changes during the last century and contain much interesting information. There is however considerable variation in the way in which details are set forth. Records for Berks. and Oxon. are sometimes given in separate paragraphs but in other accounts no such separation is made or this is done only for the older records. This can be most frustrating, as the maps are much too small and the gazetteer fails lamentably to include "villages and localities mentioned in the text and not shown on the maps".

Much more serious however, is the considerable number of errors and omissions in the list, the omissions referred to being those in the accounts of species which, because of their status or the treatment accorded to them, would seem to require the inclusion of all occurrences. Records of waders in Berkshire as a whole and particularly east of the Lodden, which is the part covered also by the Middle-Thames N.H.S., suffer most but the inaccuracy is not confined to this one order or county. Errors occur elsewhere in the book too, and in my opinion this lack of accuracy, which more careful checking should have eliminated, greatly reduces its value. The following are a few examples.

The statement on page 7 that the newly dug edges of gravel pits are the only breeding habitats of the Little Ringed Plover is of course quite wrong. This species first bred in Berks. in 1947 at Ham Fields S.F. and on a gravel pit in Oxon. in 1954, as stated in the systematic list which, however, omits the second breeding record at Ham S.F. in 1950.

Records of the Dusky Redshank (sic) for all years between 1948 and '57, except 1954, are drawn up as though listing all occurrences. On examination, however, one finds two omissions in Oxon, (Otmoor 1949 and Cassington G.P., 1955) and two in Berks. (Ham S.F., 1951 and '54), plus one in which the wrong locality is given (Farmoor for Wallingford S.F., 1956) and one wrongly dated March 23rd, instead of April 29th and May 2nd and June 16th/17th (Ham S.F., 1957). Furthermore, entries are most misleading, e.g., "1955, Sandford S.F., 4 times at end of Aug." was on the 24th, 25th, 26th and 28th, but "1956, Sandford S.F., Aug. and Sept." refers to at least four different birds on dates between Aug. 16th and Sept. 18th, including three together Sept. 13th.

Amongst other errors are, Temminck's Stint, Ham S.F., 1956—not 2, Sept. 13th to 18th but one, Sept. 13th—17th, two, Sept. 18th, and Shelduck, which since they bred in Windsor Great Park in 1954 are NOT "reported as remaining through the breeding season". Also D. Carr's name should be shown with mine after the Broad-billed Sandpiper record.

Omissions include, Grey Phalarope, Ham S.F., one Sept. 17th-21st and Ascot Place, one Sept. 18th, both 1950; Turnstone, Wallingford S.F., 1950 and Woodley G.P., 1960, and Dartford Warbler, one in S.E. Berks., Oct. 12th, 1960.

This book has been a disappointment to me. Parts of it are very good, but with more care taken in preparation it could have been so much better as a whole.

The book is well produced with clear type on good quality paper.

C. M. V.

A FIELD GUIDE TO THE BIRDS OF BRITAIN AND EUROPE. By Roger Peterson, Guy Mountfort and P. A. D. Hollom. Revised and enlarged edition in collaboration with I. J. Ferguson-Lees and D. I. M. Wallace. Collins, London, 1966. 30s.

This work was first published in 1954 and immediately became an essential tool of all serious bird watchers. It has not previously been reviewed in the *L.B.R.*, but will probably be familiar to most readers; therefore only very brief details of the arrangement are given. The text covers European birds found west of Russia. Of these, 114 accidentals, defined as species which have been recorded fewer than 20 times, are accorded brief details in a separate section near the end of the book. The main text describes 470 species, usually under the headings Identification, Voice, and Habitat. There are 362 maps showing the European distribution, with brief additional information by each map. For those species for which no map is provided, the range is mentioned in the text. All but six of the species described in the main text (but none of the accidentals) are illustrated, mostly on the 42 coloured and 24 black and white plates, a few by line drawings. Opposite each plate, brief identification details and page references are given, and on the plates are pointers to important field characters.

Since the first appearance in 1954, there have been eight reprints with only minor corrections. The present edition has, however, been extensively revised and enlarged. Two new colour plates have been added, illustrating 21 species, most of which were included in the accidentals in the previous editions. Revision is least in evidence in the colour plates (where cost is an important factor) and it is unfortunate that the new plates which replace the former plates 4 and 57 are not as well reproduced as the others from the original edition which are of high quality. Of the black and white plates, numbers 21, 38 and 40 are redrawn, and there are some additional line drawings. The distribution maps have been extensively revised and improved within the limitations inherent in the small scale.

The statement in the preface to the revised edition that "The text matter has been rewritten to embody improvements in methods of identification" perhaps implies more sweeping changes than have been made, but the qualification "this applies particularly to the more difficult groups, such as the immature eagles and terns, the small waders and the warblers, where even the experts have trouble in separating closely similar species" presents a truer picture of the extensive and valuable revisions

which have been made in the more difficult groups. Elsewhere, descriptions which were perfectly satisfactory in the earlier editions are frequently unaltered. In other cases, a phrase or two may be added or rewritten in an attempt to improve the description, usually successfully.

The sequence of families is that of the *Check-List of Birds of the World* by J. L. Peters and successors, and within the families, the sequence of species follows *The Birds of the Palearctic Fauna* by Charles Vaurie, as does the scientific nomenclature. This has meant considerable alterations to the order of species, which may be inconvenient for many users. However, if the new order proves to be that adopted for the forthcoming standard work *The Birds of the Western Palearctic* it will be of considerable benefit.

There is a useful chapter on how to identify birds, which ends with a caution that where rarities are concerned, great care should always be exercised, and detailed written notes and sketches should be made on the spot. It might have been added that detailed notes should be taken before identification is attempted by reference to the field guide or other work.

To those not in possession of one of the earlier editions, this book is an essential addition to their ornithological libraries, however small, and it is a very desirable addition for those who already own the earlier work.

F.H.J.

NATURAL HISTORY OF THE GARDEN OF BUCKINGHAM PALACE: Section on, "Birds". Stanley Cramp and Robert Spencer, 1963. *Proc. S. Lond. ent. nat. Hist. Soc.*, pp. 40-45.

An account of the bird life of Buckingham Palace Gardens was included in a report of a study of the natural history of those Gardens which was carried out by the South London Entomological Natural History Society.

Visits were made in 1960 (7), 1961 (26), 1962 (28) and 1963 (25), usually in the early morning. Excluding Feral Pigeon and Red-crested Pochard 21 species (239-310 birds) definitely bred in 1961, 20 in 1962 (247-342 birds) and 19 in 1963. The Jay and Chaffinch also were observed with some regularity but not proved to breed. For comparison other London parks had species breeding or probably breeding as follows:—

	1961	1962	Area
St. James's Park and Green Park ...	16	17	c.105 acres
Hyde Park and Kensington Gardens	23	23	c.635 acres
Regent's Park and Primrose Hill ...	28	26	c.574 acres

The Buckingham Palace garden is only about 39 acres, excluding buildings.

Species breeding regularly in all the parks:—

Water birds: Mallard, Tufted Duck, Pochard, Canada Goose, Moorhen and Coot.

Land birds: Woodpigeon, Blue Tit, Mistle Thrush, Song Thrush, Blackbird, Dunnock, Starling, House Sparrow.

All these bred in the garden in both years except Pochard, which bred only in 1961.

Nested in the two larger parks and in the Garden in both years, but only in one year in St. James's and Green Parks:—

Carrion Crow, Wren, Robin, Spotted Flycatcher, Greenfinch.

Nested in the two larger parks in both years but not in St. James' and Green Parks:—

Bred also in Garden: Great Tit
Not proved to breed in Garden: Chaffinch, Jay

	<i>Regent's Park</i>	<i>Kensington Gardens, etc.</i>	<i>Garden</i>
Pied Wagtail	Bred both years, first 1952	—	Breeds
Goldfinch	Bred both years, first 1957	—	Seen several times 1962, once 1961
Bullfinch	Bred both years, first 1959	—	Seen rarely
Tawny Owl	Bred 1961	—	Occasionally heard
Gt. Spotted Woodpecker	Bred 1961	—	Seen twice 1960

The Palace Garden thus has a good variety of breeding birds for its size compared with the parks, but has no species not breeding elsewhere in Inner London, although a pair of Little Grebes used to breed. Density of breeding species in the Garden was 61-79 birds per 100 acres in 1961 and 63-88 in 1962, very much greater than in the parks, almost certainly due to the relative freedom from disturbance.

R.C.H.

Instructions for Contributions of Papers

Papers concerning the ornithology of the London Area should be submitted to Miss E. P. Brown, 58 Ladbroke Grove, London, W.11, not later than the end of January if they are to be considered for publication in the same year, but it would be of assistance if details could be given in advance. They should be typed if possible with double spacing and a wide margin, on one side only of quarto paper.

Scientific names should be underlined, but not headings or sub-headings. References should be listed at the end, in alphabetical order of author's names, in the following standard form:—

LACK, D. (1953). *Life of the Robin*. London.

MEADOWS, B. S. (1961). The Gull Roosts of the Lea Valley Reservoirs. *London Bird Report*, 25 for 1960, 56-60.

The corresponding references in the text would be (Lack, 1953) and (Meadows, 1961).

Line drawings should be submitted separately, in Indian ink on thick white paper or card, preferably 2 × or 3 × the size finally intended. Any lettering must be large enough to be clear when reduced, and all lines must be solid black, not pale or imperfect. Legends should be typed separately as they will be set up by the printer.

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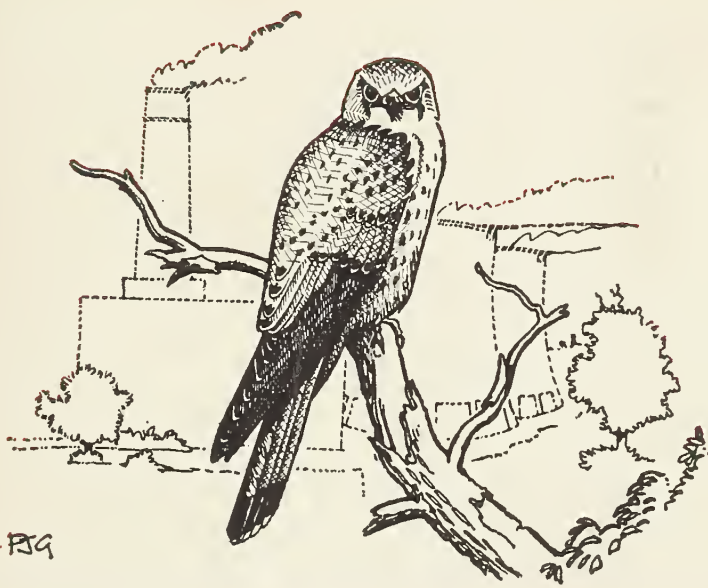
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THE LONDON BIRD REPORT

Number 31, 1966

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THE LONDON NATURAL HISTORY SOCIETY

THE LONDON BIRD REPORT

Edited by F. H. JONES

Assisted by an Editorial Committee consisting of:

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B. A. MARSH

MISS E. P. BROWN

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P. A. D. HOLLON

Introduction

RESEARCH must always remain a vital function of any natural history society and the Ornithological Section of the London Natural History Society is once again appealing for the help of members in this important field.

Enquiries invariably produce a pitifully meagre response which, were the organizers lacking in resolution, would in most cases lead to the abandonment of the project. A little effort on the part of the general membership would be of great assistance and add immeasurably to our knowledge of even the commonest of birds in the London Area.

Bryan Meadows and Stanley Cramp continue their enquiries into the status of the Black Redstart and Kestrel respectively, two species which were thought to have suffered from very widely differing causes, redevelopment of bombed sites and pesticides. In both cases much more information is required.

The National Enquiry into the breeding distribution of the Kestrel, Tawny Owl and Barn Owl called for participation by the Society and David Montier organized this for the whole of our area. By reason of hard work and good organization complete coverage on the basis of ten kilometre squares was obtained. Results are awaited with great interest.

Tony Gibbs is running the Rubbish Tips Enquiry for a further year and more volunteers to count gulls visiting them are required.

Details of the current projects are given on p.7

It cannot, however, be too strongly stressed that in all ornithological activities the welfare of the birds must come first. There must be no

damage or disturbance to the birds at any time and especial care should be taken during the breeding season when the birds are particularly vulnerable.

The only change in the team producing the 1966 London Bird Report is the regretted absence of D. I. M. Wallace who has left the London Area. His expert advice has been much missed.

We would like to congratulate Lord Hurcomb and Stanley Cramp, both of whom have been awarded the Gold Medal of the Royal Society for the Protection of Birds in recognition of their services to bird protection.

Yet another London park, Greenwich Park has been intensively studied and a paper on its bird life by P. J. Grant appears on p. 64. There is also a paper on "The Return of the House Martin" by Stanley Cramp and John Gooders on p. 93 and there are three book reviews.

ACKNOWLEDGEMENTS

The Records Committee wishes to thank all those who have contributed to this Report and also to welcome new members of the Society. The Editor is most grateful to the members of the Editorial Committee and the Records Committee and especially to Messrs. R. C. Homes and B. A. Marsh who were responsible for much of the compilation of the systematic list and to the Recorders. He also wishes to thank Mr. M. Hull for the loan of the photograph of the Great Spotted Woodpecker and Mr. P. J. Grant for the cover drawing of a Kestrel.

Assistance in the exchange of records and information was given freely by the Editors of *British Birds*, F. R. Smith (Secretary to the B.B. Rarities Committee), the officers of the British Trust for Ornithology, the Essex Bird Watching and Preservation Society, the Hertfordshire Natural History Society, the Kent Ornithological Society, the Surrey Bird Club, the Zoological Society of London and the Committee on Bird Sanctuaries in the Royal Parks. Members also have to acknowledge many kindnesses from the Metropolitan Water Board, the Greater London Council and the Croydon Corporation.

Index of Members

IN the continued absence of our own central premises every facility which might help bring our members together should at least be given a fair trial. An Index of Members of the Ornithological Section has been compiled and is now available at most of its indoor meetings. A one-inch map of the entire area is displayed and is so divided into squares as to render easy location of fellow-members in one's own square. The map is used in conjunction with the Index, a compact loose-leaf book, wherein particulars of members' activities and interests in ornithology are readily obtained.

The Index has already proved of value to officers of the Section in locating members willing to lead field meetings, give talks etc. It will also

prove of great service in providing a manning basis for research projects and generally co-ordinating the activities of members.

All members of the Ornithological Section who have not already completed an Index form or who wish to revise the information already given are now invited to contact the organizer Mr. P. J. SELLAR, 21 Essex Park, N.3 (FIN 3316).

The Year

THE END OF THE 1965/66 WINTER

The winter at the beginning of the year was mild with only two brief cold spells, from Jan. 10th to 19th, and from Feb. 11th to 17th. The second of these appeared to have little effect on the bird life, but during the earlier period, 100 White-fronted Geese flew W.S.W. over the Sevenoaks/Otford area on the 14th, and on the 17th a large flock flew over Brent Res., calling, after dark. On the 16th, a Black-throated Diver was first seen at Staines Res. and it was reported frequently up to Mar. 1st. The flock of Pochard at Barn Elms Res. was at its maximum, 1,577, on the 16th, and the same day there were about 400 Teal on the Thames at Woolwich Arsenal. Again on the 16th there was an immature Bewick's Swan at Brent Res., and two on the Chelsea and Lambeth Res., Molesey. The only other record of this species was two adults at Queen Mary Res. on the 18th. The largest flock of Bramblings reported was at Romford S.F. on the 17th. The only noteworthy hard weather movement was of Starlings, 350 flying W. at Kingston Vale on the 18th and 3,350 W. at Tooting Bec Common in 40 minutes on the 19th, the coldest day of the year. There were still 650 Teal at King George VI Res. on the 7th after larger numbers at the end of 1965, and on the 23rd there were 878 Pochard at King George V Res. Long-tailed Ducks were reported at Walton Res. on the 9th and at Queen Elizabeth II Res. on the 23rd. On the 23rd also, flocks of specifically unidentified grey geese were seen at North Ockendon, 47 flying N.N.E. and at Petts Wood, 19 flying S.E., and 60 White-fronted Geese flew N. at Romford. There was a Red-necked Grebe at Kempton Res. from the 1st to 12th, and single Slavonian Grebes at three localities. A Common Sandpiper was seen at Denham on the 22nd, a Twite trapped and ringed at Romford S.F. on the 23rd, a Merlin seen at Greenwich Park on the 29th and a Turnstone at Queen Elizabeth II Res. on the 30th. There was a noteworthy concentration of Lesser Redpolls, estimated at between 800 and 1,000, at Wimbledon Common on the 30th. There had been six Bearded Tits at Rainham on the 6th, six at Rye Meads the same day and two there on the 8th, but two, calling, at Old Parkbury on the 30th proved to be the last for the year, as for the first time since 1959 none arrived in the Area in the autumn.

The rest of the winter was not particularly eventful but some of the more noteworthy records are given. The maximum number of wintering Ruff at Perry Oaks S.F. was 15 on Feb. 6th. Following the irruption in 1965, Waxwings were reported at 42 localities at the beginning of 1966. The largest flock was between 40 and 50 at Ashford on Feb. 14th and 15th, and the last seen one at Burgh Heath on May 1st. The only Long-eared Owl reported during the year was seen at Petersham on Feb. 20th. Siskins were again widespread and common, the largest numbers as in 1965 being at Fishers Green, where there were 250 to 300 in January and February. Even more noteworthy was the ringing of 158 Siskins in a small garden at Weybridge during the period Mar. 18th to Apr. 28th; two of the birds ringed were subsequently recovered in Belgium. Of the six Shags which survived at Walthamstow Res. at the beginning of the year from the influx in November 1965, all were still present in February, but died by the end of April except a juvenile which was still there at the end of the year. Other ill-fated sea-birds were two Red-throated Divers first seen at Walthamstow Res. on Feb. 19th, one of which died on the 22nd and the other shortly after the 27th, and a badly oiled Common Scoter at Greenwich Park on Feb. 21st which died soon afterwards. The largest flock of Smew was 42 at the Brent Res. on Feb. 19th, of Goosander, 59 at Staines Res. on Feb. 20th, and of Goldeneye, 30 at Queen Mary Res. on Mar. 6th. Velvet Scoters were reported on Feb. 19th and 20th and on Mar. 14th at King George V Res. and Brent Res. respectively, and there were further occurrences of Red-necked Grebes and Long-tailed Ducks. A diver at Ruxley G.P. from Feb. 13th to 26th was either a Red-throated or a Black-throated, but although seen by a number of observers, it could not be identified with certainty. A Merlin was seen at Peckham on Mar. 26th.

Spring movements and the breeding season

An unusual record was of a Blackcap in song at Hammersmith from Mar. 1st to 10th, but whether this was a new arrival or a bird which had wintered is not known. However, the first summer migrants arrived very early. There were single Chiffchaffs at Waltham Abbey, Lonsdale Road Res. and Walton Res. on Mar. 6th and in the next ten days there were reports from twelve other localities. Other first arrivals were Sand Martin, Mar. 18th, Willow Warbler, 20th, Wheatear, 21st and Swallow, 24th, Redstart, Apr. 2nd and House Martin, Apr. 3rd. However the early spring was rather cold, and the heaviest snowfall occurred on Apr. 14th. On Mar. 30th there was a heavy passage N. of Meadow Pipits at Staines Res. and in the first ten days of April return migration swelled the number of Fieldfares. About half the records of Common Scoter were in April. After the cold weather in the middle of April, the passage of waders and summer visitors greatly increased. There were single Bar-tailed Godwits at Beddington S.F. on Apr. 16th and at Staines Res. on the 26th, Sanderling on seven dates from Apr. 17th to May 22nd, a Grey Plover at Staines Res. on May 10th and four there on the 29th, and several Turnstones between May 1st and 16th. The only spring record of Greenshank was one at

Perry Oaks S.F. on May 7th, and there were no spring records at all for Wood Sandpiper, Little Stint and Curlew Sandpiper. The largest party of Dunlin for the spring passage was 53 at Perry Oaks on Apr. 24th and of Ringed Plover, 25 on May 8th also at Perry Oaks. The peak passage of Swallows and Sand Martins was on Apr. 20th and 21st. Other records of note for this period included several Ring Ouzels in April and May, an immature Little Gull at Barn Elms Res. on Apr. 6th and two adults at Staines Res. on the 17th, two Hoopoes at Littlebrook on Apr. 10th and one at Brentwood from Apr. 20th to May 8th, a Short-eared Owl in the Romford area on Apr. 18th and 19th, and the only spring record of Pied Flycatcher on May 5th at Clapham. The Black Tern passage was on a small scale with 16 at Staines Res. on May 30th the maximum. An adult Shag found dead at Walthamstow Res. on May 2nd had been ringed at the Farne Islands. Finally a Short-toed Lark identified at Beddington S.F. on Apr. 24th was only the second seen in the London Area.

Despite the number of observers and the relatively small areas of suitable habitat for some species in the London Area, it is difficult to make satisfactory estimates of the breeding status of most species from the information submitted. This should be borne in mind when reading the comments on breeding populations which follow. Great-crested Grebe, probably 60 pairs bred or attempted to breed. Little Grebe, about 28 pairs bred. Heron, 89 pairs bred. Tufted Duck, probably over 100 pairs bred. Pochard, under 20 pairs bred. Kestrel, about 30 pairs bred; holding its own. Sparrow Hawk, one, possibly two pairs bred. Little Ringed Plover, 26 pairs known to have bred out of a possible 39 pairs at 22 localities. Snipe, one pair known to have bred, and only one other locality where breeding was suspected. Redshank, probably not more than ten pairs attempted to breed. Herring Gull, two nesting pairs at Regent's Park, one of which was successful. Barn Owl, three pairs known to have bred, but others present. Kingfisher, probably under ten pairs bred. Wryneck, one pair bred, and another probably bred. Woodlark, one pair may have bred. Whinchat, about five pairs bred. Black Redstart, eight pairs bred. Grasshopper Warbler, proof of breeding for only two pairs, but commoner than in recent years. Grey Wagtail, about five pairs bred. Red-backed Shrike, only two pairs bred. Lesser Redpoll, more information than usual; at least 70 pairs bred. House Martin, a colony of six nests at St. John's Wood was the first recorded breeding for Inner London since 1889.

Autumn movements and the beginning of winter

The first Crossbill seen in our Area following the irruption into Britain from mid-June onwards was one at Havering on June 26th, but by the middle of July birds had been reported from half the 48 localities at which they were seen. Records fell off sharply after the end of October. A Marsh Warbler was trapped and ringed near Walton Res. on July 9th. The autumn passage of waders was rather disappointing. For example,

Little Stints were seen at only three localities on five dates with a maximum of only two, and Curlew Sandpipers at only two localities on four dates with a maximum of two. The largest number of Dunlin on the autumn passage was 100 at Rainham Marsh on Aug. 3rd, and the same locality produced the maximum for Ringed Plover of 226 on Aug. 16th. Two Bar-tailed Godwits at Rainham Marsh on Aug. 5th and one on the 12th and 16th were the only autumn reports. The autumn was however remarkable for the number of rarities seen: an immature Red Kite at Beddington S.F. on Aug. 15th; an Aquatic Warbler at Queen Mary Res. on Aug. 20th and 21st; a Marsh Sandpiper at Chigwell Sewage Works on Aug. 26th, only the second record for the London Area; a juvenile White-winged Black Tern at Queen Mary Res. on Aug. 27th; a Red-rumped Swallow at Hilfield Park Res. on Oct. 1st. The passage of Black Terns, as in spring, was on a small scale with a maximum of only 16. Common/Arctic Terns were more plentiful, and at Swanscombe on Sept. 18th *c.* 500 were seen over the River Thames, numbers unusual in our Area, but not in the estuary to the east. They were accompanied by 50 Sandwich Terns and an Arctic Skua. Another skua picked up dead at Queen Mary Res. on Sept. 26th was identified at the Natural History Museum as a juvenile Long-tailed Skua. There were 20 Sandwich Terns at Walthamstow Res. on Aug. 18th, 20th and 26th, and other seabirds recorded included several Little Gulls in August, September and October, a Leach's Petrel picked up exhausted at Sundridge Park Golf Course on Sept. 18th which died the same day, a Razorbill on the River Colne at Staines Moor from Oct. 19th to 24th, a Storm Petrel at Walthamstow Res. on Oct. 23rd, another petrel, not specifically identified, at Brent Res. the same day, and a Leach's Petrel at Staines Res. on Nov. 30th.

During September first arrivals of Fieldfares, Redwings, Bramblings and Siskins were noted. On the 18th there was a heavy passage of Swallows. A "ringtail" Harrier was seen at Farthing Down on Sept. 24th, and another "ringtail", identified as a Hen Harrier, at Staines Res. on the 28th. Ring Ouzels at the end of September and first half of October were commoner than usual with records for eight localities. A considerable passage of Redwings developed on October 5th but Fieldfares were not noted in any numbers until the second half of the month, especially from the 25th to 30th. On Oct. 8th a Firecrest was trapped and ringed at Romford S.F., a Snow Bunting was seen in Hyde Park on the 17th, a Hoopoe at Totteridge on the 21st, a Rough-legged Buzzard at Nyn Park on the 28th and a Short-eared Owl at Farthing Down on the 31st. In November, a first winter male Redstart was killed by a cat at Dulwich on the 1st and the last Swallows were seen on the 9th. On the 13th and 18th there was a Snow Bunting at Staines Res. On the 17th a party of swans, either Whooper or Bewick's flew N.N.W. over Walthamstow Res. and two days later 14 flew N. at Rye Meads. In early December a Night Heron took up residence at Berrylands, but as it was very tame, it was probably an escape. Other occurrences of interest in December were a Short-eared Owl at Walthamstow Res. on the 4th, a Blackcap trapped and ringed at Beddington S.F. on the 4th, nine Brent Geese flying W. at Chigwell on the 17th, four

Buzzards soaring at Sevenoaks on the 19th, a Chiffchaff in Hyde Park on the 20th, a Peregrine at Thorpe G.P. on the 28th, a Spotted Crake at Ruxley G.P. on the 29th and 30th, 14 Ruffs at Perry Oaks S.F. on the 29th and a Shag at Walton Res. on the 31st. At the end of the year, the numbers of most species of wildfowl were lower than in recent years, no doubt due to the mild conditions.

Research Projects

Kestrel

Organized by Stanley Cramp, this enquiry aims at obtaining the fullest possible information as to the breeding status of the species in the area. Breeding season records should be submitted to the Recorders in the usual way.

Black Redstart

Bryan Meadows aims to ascertain the current status of this species which was feared to have suffered in the redevelopment of the central bombed sites. All records should be sent to the organizer at:

20 Bell Lane, Broxbourne, Herts.

Rubbish Tips

Any member willing to count gulls on the rubbish tips is asked to contact A. J. GIBBS at 271 Great North Way, Hendon, N.W.4.

Recording Arrangements

THE Society's Area is bounded by a circle of 20 miles radius centred on St. Paul's Cathedral. The recorders welcome records from members and non-members. It will assist the speedy entering of records if the following points are observed.

1. Please enter records on the Society's record sheets, which may be obtained from the recorders, in Wetmore Order (as used in the London Bird Report). Use separate sheets for each county (except Bucks to be included with Middlesex) and for Inner London, and send them to the appropriate address below, in July for the period January to June and the beginning of January for July to December. Please give locality names accurately with map reference in any difficult or doubtful case.
2. Please submit copies of field notes for all species indicated below. It would greatly assist the recorders if these supporting notes were written on separate sheets of paper for each species and attached to the appropriate record sheet. If the species is one which should be considered by the *British Birds* Rarities Committee (see list in *British Birds*, Vol. 59, No. 7, July 1966, pages 304-305) please submit your notes to that Committee as soon as possible, and send the recorder a copy, advising

him that the record has been sent to *B.B.* Do not wait until you submit your record sheets.

All rare species	All Skuas
All out of season migrants	All Gulls of irregular occurrence including Glaucous Gull, Iceland Gull, Little Gull and Kittiwake
All Divers	Terns of irregular occurrence
Grebes other than Great Crested and Little	All Auks
All Petrels and Shearwaters	Long-eared Owl, Short-eared Owl
Gannet and Shag	Wryneck
Hérons other than Common Heron	Willow Tit away from regular haunts
All Bitterns	Ring Ouzel
Scaup, Ferruginous Duck, Long-tailed Duck	Unusual Warblers
All Geese	Firecrest
Whooper and Bewick's Swans	Races of <i>Anthus spinoletta</i> other than <i>petrosus</i> (Rock Pipit)
All birds of prey except Kestrel	White Wagtail in autumn
Quail	Races or mutants of <i>Motacilla flava</i> other than typical <i>flavissima</i> (Yellow Wagtail)
Rails and Crakes, except Water Rail, Moorhen and Coot	Waxwing
All waders of irregular occurrence, and in addition Whimbrel, Godwits, Wood Sandpiper, Spotted Redshank, Temminck's Stint, Phalaropes	Shrikes other than Red-backed Shrike
	Twite, Crossbill, Cirl Bunting, Lapland Bunting, Snow Bunting

Records of the above species are currently considered by the Records Committee before being accepted for publication in the *London Bird Report*. All records published in the Systematic List must stand the scrutiny not only of readers today but also of those who may refer to the *L.B.R.* in the future, all of whom have the right to presume that records are based entirely on correct identification supported by evidence.

The Records Committee wish to thank all who already send in records and invite those who have not contributed to do so, thereby helping to make the *L.B.R.* a comprehensive account of the ornithology of London.

Recorders

Inner London	...	...	...	A. D. TOMLINS, 29 Gerard Road, Barnes, S.W.13.
North of the Thames	...	...	...	c/o B. L. SAGE, 13 Dugdale Hill Lane, Potters Bar, Herts.
	Bucks. and Middx.	...	...	P. J. OLIVER
	Essex	...	...	B. S. MEADOWS
	Herts.	...	...	B. L. SAGE
Surrey	...	...	...	B. A. MARSH, 19 Grasmere Avenue, Kingston Vale, S.W.15.
Kent	...	...	...	P. J. GRANT, 120 Edward Street, New Cross, S.E.14.

NOTE: Records from the River Thames should be treated as occurring in the county bordering the river to the South, i.e. in Surrey or Kent.

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(continued on p. 101)

THE FLORA OF BERKSHIRE

H. J. M. Bowen, M.A., D.PHIL.

Announcing the publication on 1 May 1968 of a new Flora of Berkshire.

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LILIACEAE

Fritillaria L.

F. meleagris L. *Snake's-head, Fritillary.*

Native. Damp meadows. Locally frequent by the Upper Thames, Cole and Loddon, rarely elsewhere as a garden escape. 11.

Inglesham, about 1000 plants!; Broadleaze Farm!; Grafton Lock, in quantity, GAM; Bagley Wood, 1940, EWJ; Sandford Lock, 1780, FB also 1850, J. H. WILSON, HBB and 1963, RCP!, once abundant but now nearly extinct; Thrupp, 1949, RC; Burghfield Bridge, JEL; Stanford End, 1885 and 1949, HBB! (about half a million plants in 1965); Swallowfield, by R. Blackwater, JO; Arborfield, LT, rare; Garden escapes seen at Frilford!; Mayos Farm, Wootton; East Hendred!; and Streatley, DLE; [East Hagbourne Mill, destroyed 1920; St Patrick's Stream, Hennerton and Maidenhead, FB]. This plant is still ruthlessly picked, but is in greater danger of extermination by ploughing and intensive grazing than by picking.

Erythronium L.

E. dens-canis L.

Alien. 20 plants in old plantation, Frilford, 1965!.

Tulipa L.

T. sylvestris L. *Wild Tulip.*

Introduced. Plantations, parks and near villages. Local, rare and often sterile. 5.

Kintbury, FB; Balsdon and Winding Wood, LMW; West Challow, SB; Childrey Rectory!; Between Wantage and Kingston Lisle, 1955, hbo; Charlton, 1963; Kingston Bagpuize, ABF and 1966, GAM; Bessels Leigh, FB and 1963!; [Boars Hill, Marcham and Kennington, FB; Marlston Park, 1892, GCD, hbo].

T. gesnerana L. *Garden Tulip.*

Alien. Frilford pit, 1955!, hbHJMB.

Gagea Salisb.

G. lutea (L.) Ker-Gawl. *Yellow Star of Bethlehem.*

Native. Damp woods on calcareous soils. Very local and rare. 2.

Cumnor, 1856, hbo and 1964!; Above South Hinksey, 1880, hbo and 1953!; [Inkpen and Marley Wood, FB; Cothill, Wytham and Hawkridge, ABF].

Ornithogalum L.

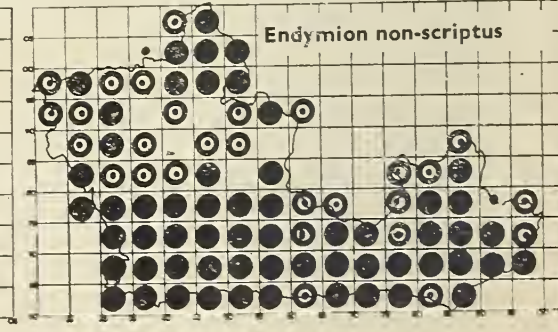
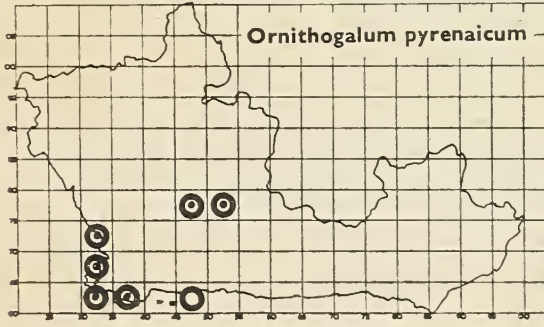
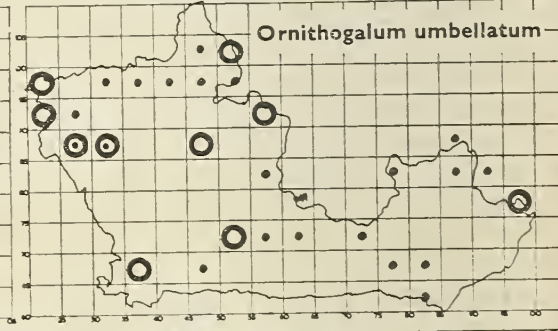
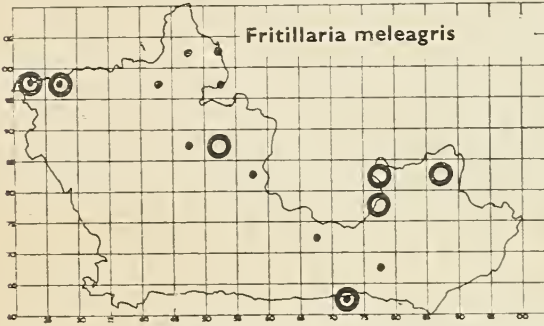
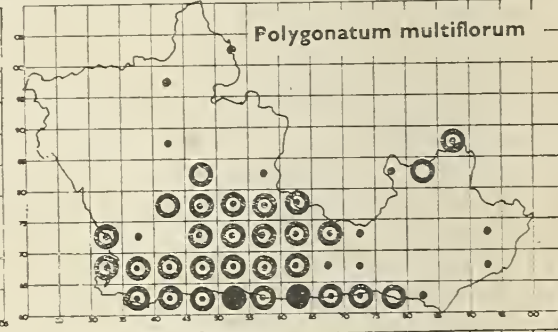
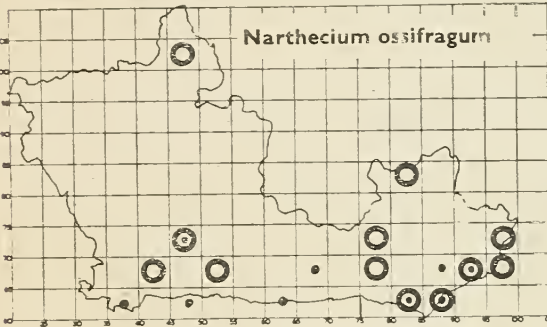
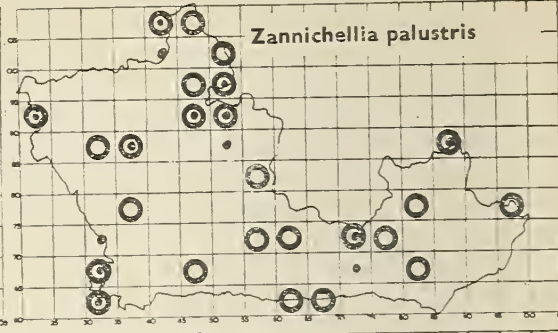
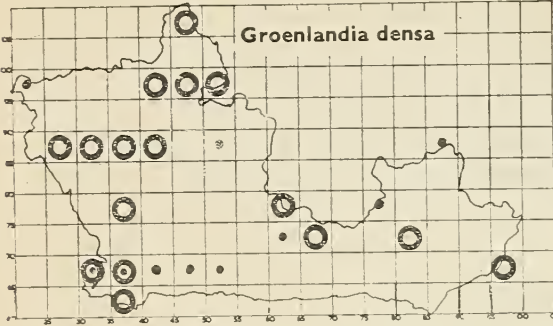
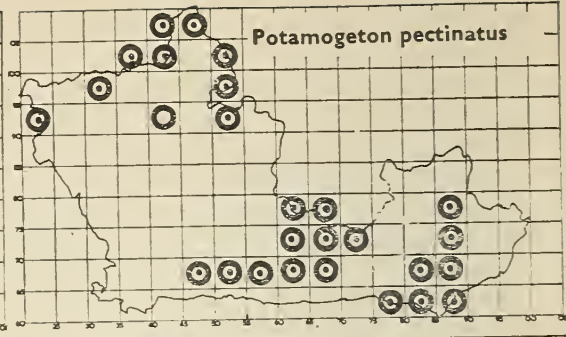
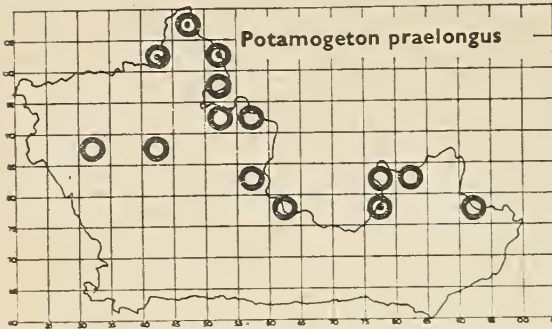
O. umbellatum L. *Star of Bethlehem.*

Native or colonist. Cornfields and grassy waste places. Local and rare. 21.

Whitehorse Hill!; Faringdon pit!; Buckland; Longworth!; Frilford, TBR!; Cothill!; Bessels Leigh!; Lower Radley, RCP; Donnington Castle, TBR; Stanford Dingley!; Streatley, DLE; Sulham, 1933, HBR; Leighton Park, JO; Arborfield; Park Place, VNP; Wellington College, GFCH; Easthampstead Park; Cookham and Cookham Dean, FA; Boulters Lock, FA; [Watchfield, Kintbury, Shillingford, Bucklebury and Windsor, FB; Rowstock, ABF.]

O. nutans L. *Drooping Star of Bethlehem.*

Introduced. Plantations and parks, rare. 3.



Birds of the London Area, 1966

A REPORT OF THE BIRD LIFE WITHIN TWENTY MILES OF ST. PAUL'S CATHEDRAL

THIS report follows the British Ornithologists' Union's "Check-List of the Birds of Great Britain and Ireland" (1952) based on the Wetmore classification, and the numbers preceding each species refer to that List where the full scientific name will be found. The vernacular names are those adopted by the Editors of *British Birds* magazine as announced in January, 1953 (*B.B.*, 46:1).

All records are for 1966 except where otherwise stated. The initials following each record refer to the observer(s) responsible for it, whose name(s) may be obtained by reference to the list of contributors on page 9.

The six counties within the circle of twenty miles radius are indicated by their initials, *viz.*:—E=Essex; H=Herts.; M=Middlesex; B=Bucks.; K=Kent; S=Surrey. Several of the Lea Valley reservoirs are partly in Middlesex, but all records referring to them are published under Essex, following the policy adopted by W. E. Glegg in his histories of the birds of Essex (1929) and Middlesex (1935). The following abbreviations are also used:—*B.B.*=*British Birds* magazine; *E.B.R.*=*Essex Bird Report*; *L.B.R.*=*London Bird Report*; G.P.=gravel pit; Res.=reservoir, S.F.=sewage farm; S.P.=sandpit; N., E., S., and W., are used for the cardinal points of the compass, but are intended only to indicate the general direction of flight; mo=many observers.

An open map of the London Area will be found useful for a full appreciation of many of the records. As the history of some of the species is intended to be continuous, reference to the Society's book *The Birds of the London Area* and to the systematic list of previous issues of the *L.B.R.* is recommended.

1 Black-throated Diver

M Staines Res., one seen frequently from Jan. 16th to Mar. 1st but not certain if more than one bird was involved (mo).

4 Red-throated Diver

E Walthamstow Res., two, one of which was oiled, on Feb. 19th. One alive and one found dead on the 22nd, and the other died shortly after the 27th (JCE, JF, RSJ, RFS).

Diver *sp.*

- K Ruxley G.P., one from Feb. 13th to 26th could not be identified with certainty and was either Red-throated or Black-throated.

5 Great Crested Grebe

The total numbers at wildfowl count localities were an improvement on last year:— 641 on Sept. 16th, 881 on Oct. 16th and 600 on Nov. 13th. Pairs in spring, which at least attempted breeding unless otherwise stated, are given below:—

- E Dagenham Chase (2), Nazeing (6 present, reared at least 13 young), Navestock (1), Walthamstow Res. (14 broods, one pair double-brooded). At Girling Res., 240 on Dec. 24th was the highest number recorded there for at least 10 years.
- H Aldenham Res. (2), Broxbourne (4), Old Parkbury (1, unsuccessful).
- M Springwell (4), Stoke Newington Res. (1, unsuccessful), Canons Park (1).
- K Darenth G.P.s (2, only one nest seen), Lullingstone (1), Ruxley (3), Sevenoaks G.P. (9 in April but only 5 in May—three nests, one as usual on an artificial raft), Sundridge G.P. (1), Sutton-at-Hone G.P. (4).
- S Barnes Res. (1), Gatton Park (2, one nest seen), Godstone (1), Littleheath Pond (1, but breeding not proved), Lonsdale Rd. Res. (1), New Lines Pond (1), Norwood Lake (1), Richmond Park (2), Silvermere (1), Thorpe G.P. (1).

6 Red-necked Grebe

- M Kempton Res., one on Jan. 1st and 12th (AJC). Queen Mary Res. one from Sept. 19th to 27th (BEC, MJR) and from Dec. 3rd to 17th (mo). Staines Res., one on Feb. 14th (MJR) and from Nov. 21st to Dec. 28th (mo).

7 Slavonian Grebe

- E Girling Res., one on Oct. 15th (JF).
- H Hilfield Park Res., one on Jan. 30th (EHW).
- M Kempton Res., one on Jan. 26th (AJC). Queen Mary Res., one on four dates from Jan. 13th (MJR) to Feb. 13th (PJO), and one on Sept. 24th which was thought to be a bird of the year and was repeatedly calling (MJR). Staines Res., one on Apr. 13th (MJR) and from Dec. 1st to 22nd (mo).
- S Walton Res., one from Oct. 23rd to 30th (CO, DP).

8 Black-necked Grebe

- E Girling Res., two on Sept. 11th (JCE) and one from 17th to 24th (JF). King George V Res., one in summer plumage Apr. 16th-17th and one on Sept. 17th (JF).
- M Queen Mary Res., three on Oct. 7th (MJR) and one on Nov. 7th (ARJP). Staines Res., one on Jan. 2nd and 6th and Feb. 2nd-27th (mo). Less than usual in late summer and autumn, the peaks being six on Aug. 24th (MJR) and Oct. 1st (BEC).

- K Sevenoaks G.P., one on Jan. 17th (JGH, JMH).
 S Barn Elms Res., one on July 5th (PEF). Island Barn Res., one or two on seven dates from Sept. 18th to Dec. 25th (DP). Walton Res., one on Apr. 7th (DP).

9 Little Grebe

- Appeals for information often meet with so little success that the response to last year's cri-de-coeur for breeding records has made the task of collating reports of this species a rewarding one for once. The only flock of over 12 birds was one of 22 at Rye Meads on Oct. 16th.
- E Fairlop G.P., three pairs each nested twice successfully, the first breeding records since the pits opened in 1959. Pairs bred at Romford, Eastbrook G.P. (2), Sewardstone G.P. (1) and Wanstead Park (2).
- H Single pairs bred at Cuffley and Nyn Park, Northaw.
- K Single pairs in the breeding season at Danson Park, Kelsey Park and Woolwich Arsenal.
- S Breeding pairs reported from Ashted (3 on two ponds near the park), Bookham Common (2), Brooklands Lake (2), Godstone Town Pond (1), Kew Gardens (2), Oxshott (1 on Littleheath Pond and present at Black Pond), Reigate Priory (1), St. George's Hill (2), Thorpe (1 on R. Bourne).

12 Leach's Petrel

- M Staines Res., one on Nov. 30th (ARJP, MJR).
 K Sundridge Park golf course, one picked up exhausted on Sept. 18th died the same evening from lack of food (FJH).

14 Storm Petrel

- E Walthamstow Res., one on Oct. 23rd (JF). On the same date a petrel, not specifically identified, was seen at Brent Res., Middlesex.

28 Cormorant

There was little change in the peak numbers at the winter roost at Queen Elizabeth II Res., where there were peaks of 65 on Mar. 13th and 77 on Nov. 13th. Records received for every month, the breeding season reports consisting of one at Staines Res on May 7th, one at Sevenoaks on May 22nd, three immature birds at Barn Elms Res. on June 26th and one flying south over Caterham on July 26th. Inner London: about the usual number of reports with three sightings.

29 Shag

- E Walthamstow Res., the six birds which survived at the beginning of the year from the influx of November, 1965 (*L.B.R.*, 30:14) were still there in February but all except one died before the end of April. The last one, a juvenile, was still there at the end of the year. In addition a dead adult was found on May 2nd with a Farne Islands ring (JF *et al.*).

- K Swanscombe, one on Sept. 3rd (FJH).
 S Island Barn Res., one on Jan. 16th and 23rd (DP). Walton Res., one on Jan. 9th and Dec. 31st (PJO).

30 Heron

- Walthamstow Res., 39 nests, with high chick mortality due to strong winds (JF).
 H Records of up to 11 at a time in the Colne Valley.
 M Kempton Park, 44 occupied nests (EMG). Largest number reported in the county was 50 at Queen Mary Res. on Sept. 13th (ARJP).
 K Clement Street, two further records of resting on arable fields (RVW).
 S Gatton Park, six nests occupied in March and April (DW).

32 Little Egret

- M St. James's Park, an adult caught by a member of the public on Sept. 12th was taken to the Zoo where it later died (EHG). It is difficult to believe that this could have been a wild bird.

36 Night Heron

- S Berrylands S.F., a very tame adult seen from Dec. 24th onwards was reported to have been there since early in the month, and from its behaviour was almost certainly an escape.

‡

Ruddy Duck

- S Walton Res., a duck on Jan. 30th and Feb. 13th (CO) was presumably an escape from one of the growing number of private collections.

Mandarin

- S Still present in usual localities but no proof of breeding received. It would be valuable to have more notes on the status of this species.

45 Mallard

The decline, which started in the London Area after the peak of 1961-62 and has continued annually ever since, was more marked than ever in the winter of 1966-67 when the average of the Nov.-Feb. wildfowl counts was only 3,306 compared with 4,187 for the same months in 1965-66 and 5,723 in 1961-62 (Nov.-Jan. only). While the last figure may be slightly high through the omission of the February count the drop is a severe one by any standard of comparison and the figure is now the lowest since the average was first calculated in 1952-53—in the earlier years of the counts there were too many gaps for the average for this species to be reliable. If, however, we consider the national index based on counts between September and March (rather than Nov.-Feb.) at about 120 different sites in England, Scotland and Wales, the average for 1965-66 was, in marked contrast, the highest then

recorded and it rose again in 1966-67. The severity or mildness of the weather is of course the controlling factor and it is clear that London experience is no guide to the national fortunes of this species. This does not of course lessen its local interest, and a continued contrary trend to that of the national index could be a pointer to climatic factors or local feeding conditions rather than the incidence of weather factors at the time of the counts. As previously pointed out the wildfowl counts provide the material for an index and are in no way a complete census of the Area. In fact the count for January 15th, 1967, was 3,440, but in a special effort to include as many other localities as possible over 3,000 mallard were counted at other sites in the Area on or about the same date. As some indication of the valuable habitat in the Area for breeding as well as wintering, 25 pairs bred in Greenwich Park and 16 broods were seen, though only 25 young reached full size, while at the Kent Sand and Ballast pits near Sevenoaks 44 broods were reared to full size.

46 Teal

It is hardly surprising that the mild winter in the south resulted in the first fall in the wildfowl count average for this species in four years, the figure falling to 706. Previous higher figures have usually been the result of one monthly count falling on a day when there had just been one of the periodic movements of teal which habitually come in waves, but in 1966-67 no large movement synchronized with the counts.

- M King George VI Res., after the very large numbers of Dec., 1965, there were still 650 on Jan. 7th after which numbers gradually dwindled. At the end of the year there were 405 on Dec. 28th (MJR).
 K Woolwich Arsenal, 400 on the Thames on Jan. 16th (RVW).

47 Garganey

- E Girling Res., a duck from Sept. 10th to 19th (JF). Wanstead Park, a free-flying duck was present for most of the year from Jan. 1st and a drake was seen in the last week of May (REH, FRT).
 H Colne valley, a duck on July 23rd seen at two pits and up to three in the first half of August (IGJ). Broxbourne Pits, two on Aug. 14th (RFL).
 M Brent Res., a duck on July 23rd (LAB). King George VI Res., a pair on Apr. 16th (CWW) and three on May 1st (MC). Queen Mary Res., one on Aug. 21st (MC).
 S Beddington S.F., a duck from July 22nd to Aug. 8th (BRS, AGH, RSB).

49 Gadwall

As there is always a strong possibility of full-winged birds from the London parks wandering, records of one or two birds only are

omitted, though it is perhaps of some interest to mention those in spring, when single birds were seen in May or June on the River Crane at Twickenham (Middlesex) and at Lonsdale Road Reservoirs.

- H Old Parkbury, four on Feb. 13th (JDM).
 M Brent Res., present from Aug. 22nd to the end of October, maximum 14 (LAB, JHW). Queen Mary Res., three on Oct. 1st (BEC). Staines Res., four on Oct. 2nd (cww).
 K Sevenoaks and Sundridge G.Ps, present throughout the year but birds have been released by W.A.G.B.I. and undoubtedly some remain. A further 13 were released on Aug. 18th. One released on Aug. 10th, 1965, was shot at Frome, Somerset, on Nov. 6th, 1966.
 S Barn Elms Res., three pairs in June (JMS). Maximum in first three months was 34 on Jan. 26th (PEF) and at the end of the year 24 on Dec. 11th (PJS).

50 Wigeon

Though the average wildfowl count fell, in common with that of most of the other surface-feeding ducks, to only 141, which is the second lowest total since 1959-60, the highest monthly figure was 254 which is one more than the previous year.

- M Inner London: Regent's Park, a pair on Jan. 16th (RCG). Staines Res., maximum 140 on Jan. 16th (DMP).
 K Greenwich Park, a duck stayed from Feb. 24th until the end of May (GPR).
 S Walton Res., although the highest total on the monthly counts was 64 on Jan. 16th there was a slight increase afterwards to 81 on Jan. 23rd (CO).

52 Pintail

- E Rainham Marsh, one on Aug. 17th (RWBs).
 H Hilfield Park Res., two on Dec. 18th (EHW). Rye Meads, one on Feb. 13th and Dec. 28th (RMRG).
 M Hampton Res., two on Oct. 16th (EMG). Queen Mary Res., one on Jan. 16th (PJO), Apr. 27th (MJC) and Oct. 11th (ARJP). Staines Res., one on Apr. 27th, 11 on Aug. 17th and one on Aug. 19th (cww).
 K Greenwich Park, two on Nov. 17th of which one stayed until the end of the year (GPR). Ruxley, a duck on Sept. 26th (FJH).
 S Barn Elms Res., one from Apr. 22nd to May 2nd. Kew Gardens, one on Mar. 5th. Lonsdale Road Res., one on Apr. 6th. R. Thames, one on Jan. 13th, Mar. 12th and Apr. 22nd. All these records are of a drake except the one on Jan. 13th and it seems likely that the same bird was involved. Queen Elizabeth II Res., a drake on Feb. 13th (CO, DP). Walton Res., two on Sept. 18th (PBL).

53 Shoveler

Confirmation of the effect of winter weather on London duck numbers is provided by this species, which has a more southerly distribution than most of the other surface-feeders.

As might be expected, and in contrast with the others, more remained than usual in the mild conditions, the average (117) and the totals for Dec. (133) and Jan. (174) being the highest yet.

In the early part of the year the largest flock was one of about 100 at Queen Mary Res. on Jan. 18th. In spring the principal records were of a pair at Walthamstow Res. in May and three drakes on June 1st, two up to June 18th at Rye Meads, five drakes at Maple Cross on June 3rd and a pair at Staines until May 1st. The usual late summer parties were seen at Rainham, and there were nine at Brent Res. on July 18th of which two to three remained until Sept. 2nd. At Queen Elizabeth II Res. there were 32 on Aug. 21st rising to 70 on Sept. 1st, and at Staines there were 75 on Aug. 22nd, while in September the most notable reports were of 126 at Queen Mary Res. on the 29th and 20 at Island Barn Res. on the 21st. October saw two flocks of three figures, 100 at Queen Mary Res. on the 1st and 104 at Staines on the 16th. Elsewhere 15 were seen at Kempton Res. on the 14th and 19 appeared at several Lea valley localities on Oct. 29th and Nov. 13th. At the end of the year the largest gathering was at Queen Elizabeth II Res., where there were 53 on Dec. 18th, while 31 on Girling Res. on the 26th was a good flock for the Lea valley.

Inner London: Regent's Park, a drake twice in Jan., a pair from Mar. 17th to Apr. 9th and at least three in November. Battersea Park, a drake on Jan. 15th could possibly have been one of the Regent's Park birds.

55 Scaup

- E Lea valley reservoirs, two drakes from Jan. 1st to Feb. 27th (JF, RSTJ).
- H Broxbourne G.Ps, two on Jan. 16th and one on 30th (BSMs).
- M Kempton Res., a drake on Feb. 19th (PC). King George VI Res., one on Jan. 29th (CWW). Staines Res., one on Jan. 16th (DMP), two on Nov. 19th (RWB, PADH, ARJP), and a drake on Dec. 11th (PC).
- S Barn Elms Res., up to three in Jan. and Feb. and a drake until Apr. 17th (MO). Walton Res., a drake from Jan. 9th to Feb. 27th (CO, PJO) and on Oct. 16th and 23rd (CO).

56 Tufted Duck

The average for the wildfowl counts was 2,981, a sharp drop on the previous winter and on the level established in 1962-63 and 1963-64. The steady increase in the first ten years of the counts now seems to have given way to a more uneven pattern which is still, however, at a higher average level than it was then. As already noted (*L.B.R.* for 1965, p. 19) the count in January, 1966, was a very high one, and the 2,003 at Barn Elms on Jan. 16th increased to 2,250 on the 22nd and 2,400-2,800 on the 23rd, before falling away rapidly to only 184 on Feb. 13th. On that date the wildfowl count of this species was only about 39% of the figure on Jan. 16th, an unusually early drop.

In autumn the usual build-up at Walton Res. reached a maximum of 699 on Aug. 21st. The largest flock at the end of the year was 1,250 at Staines on Oct. 30th. A long series of counts by MJR illustrates very well the sudden changes of numbers of this species if only one water is studied. At Staines in October there were 25 on the 25th, 580 on the 26th, 15 on the 28th, 1,250 on the 30th and 120 on the 31st. Pochard numbers changed similarly but not so dramatically.

Breeding records or ones strongly suggestive of breeding include:—

- E Fairlop G.P., one pair but breeding not proved. Ilford, one brood at Valentine's Park. Nazeing G.Ps, four broods. Sewardstone G.P., one brood. Walthamstow Res., at least 12 pairs reared young.
- H Broxbourne, two pairs bred. Maple Cross, four pairs bred. Stocker's Lake, probably two pairs bred. Rye Meads, about 40 pairs and over 25 broods seen.
- M Finsbury Park Lake, two broods seen from eight apparent pairs. Inner London: Hyde Park, one pair bred but failed to rear young. St. James's Park, over 40 nests on Duck Island and seven broods on July 14th.
- K Kelsey Park, one pair bred. Sevenoaks G.P., four broods. Sundridge G.P., six broods. Sutton-at-Hone G.P., a "number" of broods.
- S Barn Elms Res., about 12 pairs on May 31st and four-five pairs bred. Clapham Common, one pair bred successfully. Thorpe G.P., 12 birds plus a female with four young on July 17th. Inner London: Battersea Park, one pair bred but young disappeared when four days old.

57 Pochard

Numbers in the earlier part of the winter were high, but there was a fall in Dec. and on Jan. 16th, 1967, the total was only just over half the abnormally high figure for the same month a year before. The final winter average was 1,029 compared with 1,479 the previous winter.

- E The Lea valley featured in the record numbers of Jan., 1966, with c.600 at King George V Res., 250 at Walthamstow Res. and 46 at Girling Res., on the 15th. Eight days later there were 878 at the first locality. There was an influx at the very end of the year.
- M Finsbury Park Lake, one brood in June. Harefield, 150 plus on Dec. 26th. Queen Mary Res., maxima of 205 on Jan. 13th, and 130 on Oct. 30th rising to 225 on the 31st. Staines Res., a peak of 386 on Jan. 16th; the summer gathering was heralded by two drakes on June 18th and reached about 75 on July 17th. On the same day in October as Tufted Duck appeared in large numbers there were 750 on the 30th, and after some fluctuations again on Nov. 13th. On Dec. 30th there was another peak of 470. Stoke Newington Res., 103 on Jan. 23rd. Inner London: Hyde Park, four pairs each reared five young after three years without breeding records. St. James's Park, on July 4th there were nine broods and some unattached ducklings totalling 41 young in all.

S Ashtead Park Pond, one on May 14th. Barn Elms Res., 1,577 on Jan. 16th and still 1,250+ on the 22nd. Summering birds appeared as usual in June reaching 23 drakes on the 25th after two drakes had arrived as early as May 30th (cf. Staines). At Queen Elizabeth II Res., they reached 33 on July 3rd, at Richmond Park eight on July 24th and at Walton Res. 27 on July 31st. Thorpe G.P., one brood seen. Inner London: Battersea Park, breeding attempted unsuccessfully.

58 Ferruginous Duck

The following records of this species probably refer to escapes from captivity.

H Cheshunt, one on June 4th was still there on July 10th (RFL).

M Staines Res., an adult drake on Sept. 28th (ADP). Inner London: Regent's Park, a full-winged duck, which was not a resident there, on Mar. 4th (RCG).

60 Goldeneye

On the count dates the peak numbers showed a slight decline from 90 in 1965-66 to 77, consistent with the results for Pochard and Tufted Duck. Rather surprisingly the peak was as early as December after which there was a slight drop to 71 in January and 67 in February.

In the first four months of 1966 the largest numbers were 16 at King George V Res. on Apr. 4th, 24 at the Lea valley res. on Feb. 27th, 30 at Queen Mary Res. on Mar. 6th, 20+ at Staines Res. on Mar. 18th and 26 at Walton Res. on Feb. 13th. At the end of the year peaks were of 20 in the Lea valley on Dec. 31st and 25+ at Queen Mary Res. on Dec. 7th. Numbers did not reach double figures at any other locality.

61 Long-tailed Duck

M Staines Res., a drake on Mar. 30th (RWA) and a duck on Nov. 5th (MJR).

S Queen Elizabeth II Res., one on Jan. 23rd and Feb. 13th (CO, DP). Walton Res., one on Jan. 9th (PJO), a drake on Feb. 19th (AJC) and from Mar. 5th to 20th (AJC, CO).

62 Velvet Scoter

E King George V Res., a drake and two ducks on Feb. 19th (JCE, JF, PJV) and a drake on the 20th (RFS).

M Brent Res., a drake and three brown birds on Mar. 14th (LAB).

64 Common Scoter

E Girling Res., a duck on Aug. 2nd (JF). Walthamstow Res., a pair on Apr. 2nd (JF), and two ducks from Oct. 8th to Nov. 12th, one remaining until Dec. 11th (JF, BSMs).

- M Brent Res., two drakes and a duck on Apr. 6th (LAB). Queen Mary Res., a pair on Apr. 8th (RSB). Staines Res., a drake on Apr. 14th (CWW) and seven ducks on Nov. 10th (ARJP).
- K Greenwich Park, a badly oiled duck on Feb. 21st died shortly afterwards (GPR).
- S Island Barn Res., a drake on Jan. 23rd and a duck on Apr. 24th (DP).

69 Red-breasted Merganser

- E King George V Res., a pair on Jan. 23rd (JCE). Walthamstow Res., a drake on Jan. 15th (JF).
- H Hilfield Park Res., four brown-headed birds on Jan. 15th (BLS).
- M Staines Res., a drake on Feb. 27th (GCG) and a duck from Nov. 18th (ARJP) until Dec. 15th (CAW).
- S Barn Elms Res., a drake on Apr. 11th (JMS). Richmond Park, a duck on Apr. 23rd (EDB, FRK, FGMCC). R. Thames, a duck near Richmond Bridge on Feb. 3rd (JPH). Walton Res., a duck on Feb. 27th (CO).

70 Goosander

There is still a great shortage of wintering Goosanders in the Area, the wildfowl count average being down again at 63 and the peak at 98. These are the lowest figures since the counts started.

In the first part of the year maxima were 11 at King George VI Res. on Jan. 25th and Mar. 5th, 16 at Island Barn Res. on Jan. 16th, 50 at Queen Mary Res. on Feb. 2nd, 59 at Staines Res. on Feb. 20th and 51 at Walton Res. on Jan. 9th. The highest numbers in the last few months were 35 at Staines on Dec. 15th and 41 at Walton Res. on Dec. 31st. No more than four were seen at any other locality. The injured bird remained at Walthamstow Res. for the sixth successive year.

71 Smew

The winter of 1966-67 was another poor one for Smew with a maximum count of 49.

In early 1966 numbers had been a little better and on Feb. 13th there were varying reports from Staines of up to 25, and there were 39 at Stoke Newington Res. and 41 at Brent Res. These were the peaks except for one more at Brent Res. on the 19th. Elsewhere the only counts which reached double figures were of 10 at Barn Elms on Jan. 28th and 10 at Walthamstow Res. on Jan. 14th. In December there were peaks of 14 at Stoke Newington Res. on Dec. 21st and 20 at Brent Res. on Dec. 30th. Inner London: Hyde Park, a "red-head" on the Serpentine on Jan. 14th (RFS). Regent's Park, a "red-head" from Jan. 21st to 29th, one on Feb. 12th and a pair on the 13th (RCG).

73 Shelduck

Inland, in January, there was one at Rye Meads on the 8th-9th and a marked passage later in the month when there was also a big increase of diving ducks. The first to be seen were 16 at Barn Elms on the

22nd, followed by two at Walton and four at King George V Res. on the 23rd. Three at Barn Elms and one at King George VI Res. on the 29th were probably overflows of the same movement. In February five at Sevenoaks G.P. on the 12th were followed by seven at Staines on the 13th and one on the adjacent moor on the 18th. The only March records were of two at Staines from the 1st to the 12th. A small scatter of six records in April and the first half of May of from one to three birds suggest movement within the Area but include two new localities—one at Ruxley on Apr. 8th and a pair flying over at Belvedere on May 12th. As usual there was an absence of records from June to August, with the sole exception of one at King George V Res. on Aug. 6th. The usual autumn moult migration was only represented by six immature birds at Staines on Sept. 1st, after which the only reports until December were of one at Queen Elizabeth II Res. on Sept. 29th and at Staines on Oct. 26th. In December one immature was at Sevenoaks on the 13th and two flew north at King George V Res. on the 17th. Throughout, no account has been taken of a resident bird in the Barnes district.

On the Thames estuary there was no evidence of breeding, and a paucity of records which suggests a lack of observation. At Rainham there were nine adults on Aug. 21st, 14 juveniles on Sept. 10th and 58 birds on Oct. 13th. On the south side at Swanscombe 33 on Mar. 12th, five on Apr. 11th and 11 on Dec. 30th.

Grey geese *sp.*

- E North Ockendon, 47 flying low N.N.E. on Jan. 23rd (MJA).
- K Petts Wood, 19 flying low S.E. over woods on Jan. 23rd (AW).
- S Chessington, 12 flying W.S.W. on Mar. 30th (SG).

75 Grey Lag-goose

- E Nazeing Meads, one very tame bird, possibly an escape, on Dec. 15th-16th (BSMs).
- M Moorhall G.P., two probable escapes from Aug. 7th to the end of the year (IGJ). See *L.B.R.* for 1965, p. 22.

76 White-fronted Goose

- E Romford, 60 flying north on Jan. 23rd (RRS).
- M Brent Res., a large flock flew over calling after dark on Jan. 17th and were considered by LAB to have been of this species.
- K Sevenoaks/Otford, about 100 flying W.S.W. on Jan. 14th (JGH, JMH)

80 Brent Goose

- E Chigwell, nine flying west on Dec. 17th (KN).
- K Sevenoaks G.P., an adult of the dark-breasted form (*bernicla*) on Feb. 10th (JGH, JMH).
- S Richmond Park and Walton Res., one of the same form at each locality, presumably the same bird, on Jan. 23rd (DG, EK, CO, DP, DRR).

81 Barnacle Goose

- K Sevenoaks G.P., an adult for about an hour only on June 6th (JGH, JMH), may have been an escape.

82 Canada Goose

Breeding season records and the biggest numbers only follow:—

- H Colne valley, two at various localities in March, April and May.
 M. Mill Hill, one flying north on May 21st. Moorhall G.P., 13 on Aug. 7th and seven in Dec. Osterley Park, a pair from early April to the 21st. Poyle G.Ps, seven on June 12th. West Hyde G.P., 11 on June 20th. Wraysbury Res., a pair on May 26th and seven on June 5th. Inner London: Hyde Park and Kensington Gardens, one pair bred and reared one gosling; maximum number was 85 on Oct. 5th and 11th—the number of two ringed birds was read by JW and they proved to belong to the original flock which was introduced in 1955. Regent's Park, at least 70 on Oct. 17th. St. James's Park, three pairs reared 15 young; maximum number 78 on Sept. 14th. There is no doubt that there is a considerable interchange between the parks.
- K Darenth G.P., one brood. Sundridge G.P., 123 on Oct. 2nd. Sutton-at-Hone G.P., two broods reared successfully.
- S Clapham Common, 17 on Sept. 16th. Godstone, pair with two young on June 30th. Holmethorpe S.P., one pair raised three young. Painshill Park, two pairs, one with six young, on May 15th. South Marden, about 13 flying north on Feb. 13th. Inner London: Battersea Park, three pairs bred.

84 Mute Swan

Numbers on the Thames continue to decline and are now only a fraction of what they were a few years ago. On the monthly wildfowl counts totals on the usual waters were as follows:—

	<i>Oct. 16</i>	<i>Nov. 13</i>	<i>Dec. 18</i>	<i>Jan. 15</i>	<i>Feb. 12</i>	<i>Mar. 12</i>
1966-67	115	99	94	89	85	103

- M Inner London: none bred in Hyde Park though two birds were present which had been ringed at Putney in 1965. In St. James's Park one pair produced two cygnets, but there was no successful breeding in Battersea or Regent's Parks.
- K Blackheath, out of 10 in April most bore B.T.O. rings put on at Chelsea, Rye Meads and Wanstead. Later a pair tried to breed at Greenwich Park but were removed because of interference with other waterfowl.
- S Breeding reported from Gatton Park, Godstone, Lonsdale Road Res. (unsuccessful), Painshill Park, Reigate Priory (unsuccessful), Silvermere, Thorpe G.Ps—one pair at each place except the last where there were two. More reports of breeding in the Area would be welcome.

85/86 Swan *sp.*

- E Walthamstow Res., about 27 flying N.N.W. on Nov. 17th were either Whooper or Bewick's Swans (RW).
 H Rye Meads, 14 of one of the above species flying N. on Nov. 19th (RMRG).

86 Bewick's Swan

- M Brent Res., one immature on Jan. 16th (LAB). Queen Mary Res., two adults on Jan. 18th (SG).
 S Molesey, two on Chelsea and Lambeth Res. on Jan. 16th (DP).

91 Buzzard

- H Panshanger, one on Jan. 16th, which according to the local keeper had been present since October 1965 (MPI, BLS).

Buzzard *sp.*

- M Highgate Village, one circling and drifting south on Nov. 2nd (KM).
 K French Street, one on July 16th (KCO). Sevenoaks, one drifting westwards on Oct. 9th and four soaring at a great height on Dec. 19th (JMH, JGH).

92 Rough-legged Buzzard

- H Nyn Park, one circling over Well Woods at 08.00 hrs on Oct. 28th (JPW).

93 Sparrow Hawk

- An increase in observations, though smaller than 1965, was again noted during the current year. One, probably two pairs, nested these being the first breeding records for three years. All records are given.
- E Havering, a female on Apr. 2nd and Dec. 4th (JEF). Harold Wood, one seen on many occasions between May 3rd and June 5th preying mainly on young starlings (MM, IFR). Epping Forest, a female seen on several occasions between May 15th and July 4th (FR, PJV). Brentwood, one pair probably bred (MM). Romford S.F., one on July 4th, Aug. 26th and 30th (RRS). South Weald, a female on Oct. 9th (JTS).
- H Mimms Wood, one on Jan. 2nd (MPI). Broxbourne, one on May 2nd (BSMs). Nyn Park, one on Aug. 20th (RPW).
- M Mill Hill, a female on Oct. 6th (EHW). Inner London: Regent's Park, a female circling over the Zoo on Mar. 2nd (RCG). Queen Anne's Gate, a female seen to catch and eat a Sparrow on Nov. 25th (SW).
- K Beckenham Place Park, one reported during early April (PK). Sevenoaks, adult female on Nov. 3rd (JMH, JGH).
- S South Marden, one on Mar. 19th (AJH). Nork Way, Banstead, one on Mar. 26th and June 7th, a male on Oct. 30th and a female on Nov. 30th (EMF). Near Wisley, one pair bred successfully within L.N.H.S. area (CO). Ashted, one on July 6th (DP). Bookham

Common, one on July 17th and Aug. 14th (GB, EMH). Richmond Park, one on Aug. 14th (AJC). Weybridge, a female on Dec. 29th (GHG).

95 Red Kite

S Beddington S.F., full details have been received of an immature flying south on Aug. 15th (RSB).

100 Hen Harrier

M Staines Res., one, a "ring-tail" well seen on Sept. 28th (ADP).

Harrier *sp.*

S Farthing Downs, one, a "ring-tail", seen on Sept. 24th may be connected with the record above (AJH).

104 Hobby

M Kenwood, one on June 4th (RWA). Staines Res., one on June 10th and Aug. 15th (RWA, cww). Queen Mary Res., one chased off by a "comic" tern on July 17th (PJO).

S Princes Coverts, one chasing martins on May 16th (IRB). Thorpe G.P., one flew in from S.W. on July 17th (GHG). Near Ockham Common, one entered L.N.H.S. area on July 31st (PJO). Brooklands, two on Aug. 16th (co). Chertsey, one flying over on Sept. 11th (JAS).

105 Peregrine

S Thorpe G.P., one on Dec. 28th (GHG).

107 Merlin

K Greenwich Park, one flying over on Jan. 29th (PJO). Peckham, one flying north on Mar. 23rd (MH).

110 Kestrel

Since 1962, when an appeal was made for all records of this species, the number of breeding pairs recorded in the area has been:— 1963—10/11 pairs; 1964—29/31 pairs; 1965—29/30 pairs and 1966—29/32 pairs. (The lower figure represents definite breeding pairs, while the higher includes pairs probably breeding). In addition pairs were reported as present in the nesting season, without any evidence suggestive of breeding being obtained, at a number of other localities (16 in 1963, 13 in 1964, 28 in 1965 and 27 in 1966). These figures suggest that after a sharp increase in 1964 the population of Kestrels in the area has since remained steady. However, it is clear that the coverage of known breeding sites varies from year to year so too much reliance must not be placed on these figures.

Definite and probable breeding records in 1966 are given.

- E Chigwell, two pairs present at sewage works, one pair bred (RECC). Walthamstow reservoirs, a pair raised one young (RSTJ). Hainault Lodge, nest, with four eggs, but later deserted (ACP).
- H Pairs reported breeding at Watford (JDM); Hilfield Park Res., where three young hatched (BLS); West Hyde (JRB), and at or near Maple Cross, where a fledged family was seen on May 30th (HCD).
- M Staines Moor, a pair reared one young (PWA); Hampton Court Park, young successfully raised by one pair (WRI); Bushy Park, nest on June 23rd with one egg and one young (WRI).
- M/S Inner London. Again bred successfully at Langham Place (sc), but nesting not proved at Imperial College, although apparent mating witnessed on May 10th (WR). Near Regent's Park a pair nested in a disused power station (RCG).
- K The only breeding records were of a pair at Otford, seen later with young (JMH, JGH) and another pair at Beckenham Place Park, observed collecting nesting material (PK).
- S This again appears to be the stronghold of the species in the Area. At least three pairs bred in the vicinity of Beddington S.F. (KCO); Brooklands, a pair reared four young (CO); Prince's Coverts, Epsom Common and Chessington, one pair bred at each (IRB, JRB); Richmond Park, six or seven pairs thought to have bred (CES *et al.*); Thorpe/Chertsey, one pair bred successfully (GHG); and Mitcham, nest of four young ringed on June 8th (MJcd). Sanderstead, one pair bred (LWC).

115 Red-legged Partridge

Breeding distribution is given and two autumn coveys.

- E Great Parndon Wood, plentiful in the breeding season and out-numbers Common Partridge (HPM). Fairlop and Hainault Lodge areas, a maximum of ten pairs (ACP). Epping Forest, two on July 1st (BSMs). Romford S.F., one on May 1st and June 12th (RRS). Rainham, 12 on Aug. 27th (RT).
- H Shenley, Ridge and Well End, three pairs (ASK). Broxbourne G.P., two pairs bred (BSMs, HPM). Northaw and Cuffley, four pairs at three localities on April 30th (TJ, JJ).
- M Queen Mary Res., one pair on May 1st (GHG). New Wraysbury Res., one pair on June 5th (WRI). Perry Oaks S.F., one pair on May 14th (cww).
- K Littlebrook, two pairs on Apr. 11th (LOC). Hogtrough Hill, three pairs on Apr. 3rd (RVW). Woolwich Arsenal, half the area produced six pairs during April (RVW). Single pairs were also seen in Spring at Clement Street, Dean Bottom, Horton Kirby, Stone Quarry, Green Street Green and Longfield (RVW).
- S West Molesey, a single bird on May 21st (DP). At Wey Manor Farm on Sept. 3rd 12 were seen where a pair bred in 1965.

117 Quail

- E Girling Res., one or two calling frequently from grassland between May 22nd and 30th (JF, PJV).

- K Horton Kirby, one calling on May 29th and July 3rd (RVW).
Clement Street, one calling on June 29th and July 23rd (RVW).

120 Water Rail

Herts. and Surrey are slightly summarized but otherwise all records are given.

- E Brentwood, one on Jan. 25th (HM). Fishers Green, one found dead under telephone wires on June 12th (JCE). Navestock, one on Nov. 26th (DGH).
- H Cassiobury Park, up to three seen and heard throughout the year (mo). One or two birds were also reported from Old Parkbury, Springwell G.P., Rickmansworth, Watford, Nyn Park, Stocker's Lake, Northaw and Maple Cross during January and February and the last three months of the year.
- M Highgate Ponds, one until Apr. 18th and from Oct. 8th till the end of the year (AC, EHW). Brent Res., one on Jan. 9th (PHS). Harefield Moor, one on Jan. 22nd and 23rd (IGJ). Inner London: Buckingham Palace Gardens, one caught by a cat on Dec. 7th was unharmed and was released three days later when it was seen by observer (sc).
- B Tatling End S.F., one on Dec. 3rd (IGJ).
- K Ruxley G.P., usually one until Apr. 7th but two on Jan. 23rd (FJH, PMW, RVW), one on Nov. 19th and 25th and three on Dec. 5th (FJH, RVW). Sutton-at-Hone, one on Dec. 5th (RVW).
- S Beddington S.F., up to three during the first two months and the last three months of the year (mo). Barn Elms Res., one or two at both ends of the year and one on Sept. 24th (JMS). Richmond Park, one Sept. 2nd (RHBF). Singles were seen at Godstone, Thorpe G.P. and Holmethorpe S.P. in November and three were noted at Thorpe on Dec. 28th (GHG).

121 Spotted Crake

- K Ruxley, one on Dec. 29th and 30th (GFAM).

131 Oystercatcher

- E Girling Res., two on Jan. 23rd and one on Sept. 18th (JCE). Walthamstow Res., one on May 30th and June 4th (JF, RSJ). Rainham Marsh, one on Aug. 12th (RT).
- H Hilfield Park Res., one on Feb. 12th (BLS). Cheshunt, one on Aug. 7th (HPM).
- M Brent Res., one on nearby football pitch on Feb. 12th (HPM). Queen Mary Res., one on Feb. 19th and Aug. 22nd and two on Apr. 29th (BAM, MJR). King George VI Res., two on Apr. 12th and one on Dec. 28th (MJR). Staines Moor, seven on Apr. 11th (CWW). Staines Res., two on Apr. 12th and one on four dates between July 21st and Aug. 7th (RWB, CWW).
- S Near Reigate, one on marshy field on Jan. 29th (EMCI). Barn Elms Res., one on May 22nd (RM).

133 Lapwing

Movements during the first three months of the year were few and the numbers involved were small. Between Jan. 11th and 19th some birds were moving in a southerly direction but from Jan. 27th and during the first week of February most flocks seen were heading north-east. By far the largest numbers during this period were 248 in one and a half hours over Riddesdown on Feb. 6th. At Sevenoaks in March numbers dropped from *c.*500 on the 1st to four on the 12th. The expected mid-summer movements began in late May, continued on a small scale through June and early July but from July 16th to the 27th flock totals were higher. The largest numbers at this time were on July 18th when AJH noted *c.*300 between 14.00 hrs and 15.00 hrs flying over Headley Heath, mJw counted 65 between 19.15 hrs and 20.00 hrs over Richmond Park and at Romford S.F. *c.*200 were present instead of the usual maximum of about 50. At two localities an increase was noted in August and a build-up in numbers was apparent at two sites during the first half of September. During October flocks favoured a north-westerly direction generally and the most notable of these was 650 in four hours over Clement Street on the 4th (rvw). December provided increases at Rye Meads and Staines Moor when flocks totalled *c.*1000 birds at both sites on 18th and 25th respectively.

134 Ringed Plover

Spring passage was first noted on Mar. 6th and extended over twelve weeks with records mainly of small numbers (up to six) except at Perry Oaks S.F. where on May 8th and 22nd flocks of *c.* 35 and *c.* 20 were noted.

Although no definite breeding was reported two pairs were seen at Rainham Marsh on June 3rd and a single pair a week later. These dates however do not rule out the possibility of the birds being late migrants.

Autumn passage lasted eleven weeks from July 9th; again the numbers were small except at Rainham Marsh where the maximum was 226 on Aug. 16th (KB).

135 Little Ringed Plover

Of a possible 39 pairs at 22 localities in the breeding season, 26 pairs bred or attempted to do so.

- E Twelve pairs at eight sites; four pairs rearing eleven young.
- H Nine pairs at four sites; three pairs with young in July.
- M Seven pairs at two sites; one pair with young in June.
- K Four pairs at four sites; three pairs with young in June.
- S Seven pairs at four sites; Three pairs rearing a minimum of six young.

139 Grey Plover

- M Staines Res., one on May 10th, four on May 29th and one on Nov. 13th (RWB, MJR). Queen Mary Res., one on Aug. 22nd (BAM).

140 Golden Plover

- E Fairlop, 150/200 on Jan. 6th (JTS). Hainault, *c.* 270 flying south on Jan. 9th (KN). Epping Green, eight on Nov. 12th (HPM).
- H Shenleybury, 14 on Jan. 8th, 12 on Feb. 6th (EHW), *c.* 150 during December with *c.* 230 on Dec. 18th (ASK, JDM). Cuffley, 11 on Feb. 26th (JJ). Stanborough, *c.* 100 on Jan. 1st and again on Apr. 21st and 22nd (PAMD).
- M Staines Moor, 130 on Feb. 19th (cww). Staines Res., one on Aug. 16th (cww). Perry Oaks S.F., one on Oct. 1st and two on nearby London Airport the following day (JRB, MJR). Staines Moor/London Airport, 140-180 seen regularly from mid-November (MJR).
- S Barn Elms Res., one on Jan. 2nd (PJS). Beddington S.F., one on Aug. 25th (NDH). Princes Coverts, two flying west on Oct. 8th (IRB). Croydon Airport, one with Lapwings on Nov. 17th (KDGM).

143 Turnstone

- E Rainham Marsh, one on July 29th, four on Aug. 5th, three on Aug. 10th and 12th and one on Aug. 27th (NJI, MM, RT).
- M Perry Oaks S.F., one on May 7th, 8th and 16th and Aug. 3rd (RWA MJCd, RAD, CAW). Queen Mary Res., three on May 1st, one on May 5th and Aug. 14th, 19th and 28th (MC, MJR). King George VI Res., two on May 12th (MJR). Staines Res., one on May 1st (cww), Aug. 11th (MJR), and three on Aug. 14th (MJR).
- S Queen Elizabeth II Res., one on Jan. 30th (MC).

145 Snipe

- One pair bred successfully in Kent and two or three pairs were present at a Surrey locality but no young were seen. Two records for Inner London are given and maxima for Beddington S.F., the only locality where large numbers were seen.
- M Inner London: Regent's Park, two flew N.W. on April. 26th and one flew N.E. on Sept. 10th (RCG).
- S Beddington S.F., maxima at the beginning and end of the year, *c.* 500 on Jan. 15th and Dec. 4th (KDGM, KCO).

147 Jack Snipe

- E Waltham Abbey Marsh, one on Jan. 1st, Mar. 13th and Apr. 10th (RFL). Romford S.F., one on Feb. 26th, Oct. 16th and 20th (RRS). Nazeing Meads, one on Dec. 26th (BSMs).
- H One or two on isolated dates at four localities in January, March and April but three at Rye Meads on Dec. 18th (RMRG) and five at Broxbourne Pits on Apr. 10th (RFL).
- M Singles at Staines Moor, Brent Res. and Perry Oaks S.F. on isolated dates during the winter months.
- K Elmers End S.F., six on Jan. 15th (KAJG). Singles at Ruxley, Sundridge and Chipstead again on isolated dates at both ends of the year.

- S Beddington S.F., up to eight in January and four in February, April and December (BRS). Hershams S.F., up to three from January to Apr. 7th (DP). Holmethorpe S.P., up to eight in January and February (DW). Singles at six other localities during the winter months.

148 Woodcock

Breeding season and one Inner London record are given.

- E Thorndon Park, one roding on May 16th and 26th (MSF, APS, JTS).
 H Broxbourne and Hoddesdon Woods area, "probably not less than ten pairs" (BSMs). Northaw Great Wood, one or two roding from late April through to June (JPW). Brookmans Park, one during June (JPW).
 M Inner London: Regent's Park, one on College site on Oct. 17th (EHW).
 K Charts Edge, birds roding from May to July and on June 20th, one flushed and flew thirty yards carrying young between the thighs with legs dangling (RVW). On dates in June, singles were roding at Goodley Stock, Sundridge, Brasted Chart and Crockham Hill (RVW).
 S Walton Heath, one on June 8th (MJcd). Bookham Common, up to two from April to August (MO). Limpsfield Chart, six to ten roding on June 4th (DW). Esher Common, up to two during June (CRAC, WRI, PJO). Headley Heath, one on July 3rd (RHBF). Princes Coverts, two roding in May and June (IRB, DP).
 At dusk on Oct. 26th, RSB saw a bird flying down the main Balham/Kennington road. Appearing confused it flew under the street lamps and after skimming the top of a bus, disappeared between two buildings.

150 Curlew

With the exception of two isolated records during the first two months, all records for the current year fell between mid-March and the end of September. Up to four in spring on some fifteen dates. Reported on twice as many occasions during the autumn including seven flocks of between 10 and 16 individuals.

151 Whimbrel

- E Walthamstow Res., one on Apr. 22nd (RFS). South Weald, one on Aug. 21st (MPT). Harold Hill, one heard calling at night on Aug. 21st (MPT). Waltham Abbey, fifteen flying S.W. on Sept. 11th (JCE).
 H Rye Meads S.F., one flying south on July 30th, one on Aug. 7th, thirteen flying south-west on Aug. 13th and one flying south on Aug. 21st (RMRG).

- M King George VI Res., one on Apr. 17th and May 12th (MJR).
 Staines Res., three flying west on May 12th (cww). Queen Mary
 Res., one on May 1st, three flying east in addition to one feeding
 bird on the following day (MJR), one on July 17th and Aug. 29th
 (PJO, MJR). Staines Moor, one on Sept. 7th (CAW).
- S Beddington S.F., one on Apr. 17th (PJW), two on Apr. 29th (PLC),
 one on May 1st (KCO) and three flying east on May 3rd (RSB).

155 Bar-tailed Godwit

- E Rainham Marsh, two on Aug. 5th and one on Aug. 12th and 16th
 (KB, RT).
- M Staines Res., one on Apr. 26th (cww).
- S Beddington S.F., one in winter plumage on Apr. 16th (KCO).

156 Green[†] Sandpiper

Although reported in every month of the year, this species was
 again more widespread during the autumn migration, but the
 numbers at the various sites only once exceeded six, namely 31 at
 Rainham Marsh on Aug. 3rd (RWB). During the four winter
 months usually one or two birds were present at some fourteen
 localities, though only three of these were south of the Thames.
 At Mill Hill on Sept. 5th one was present "by a rain puddle on a
 temporary road for lorries" (EHW).

157 Wood Sandpiper

No spring records were received and all autumn records are given.

- E Rainham Marsh, one on Aug. 7th (RES). Walthamstow Res., two
 on Aug. 26th (REH).
- M Perry Oaks S.F., two on July 21st and five the following day (RWB),
 four on July 23rd and 24th (MC, MJR) and five from July 25th to 31st
 (PJO, MJR, cww). Brent Res., one on July 28th (EHW). Staines
 Moor, four on Sept. 15th (RWB).
- S Holmethorpe S.P., one on Aug. 13th (DW). Hersham S.F., one on
 Aug. 20th, 21st and 28th (MC, DP) and two on Aug. 29th, 31st and
 Sept. 12th (MC, CO). Beddington S.F., three from Aug. 29th to
 Sept. 2nd and one on Sept. 4th (RSB, AG, KCO, ADP).

159 Common Sandpiper

After only one winter record of a single bird near Denham on Jan.
 22nd, the spring passage period lasted from Apr. 3rd to June 1st
 with a maximum of six at the Lea valley reservoirs in mid-May.

No breeding records were received but there was a single bird at
 Beddington S.F. on June 29th.

The autumn passage began on July 13th with the peak numbers
 occurring towards the end of the month, through August and into
 the beginning of September. The maxima this time were 30 at

Rainham Marsh and 35 at the Lea valley reservoirs on July 31st and Sept. 3rd respectively. Thereafter one or two birds were seen at five sites through October and one at Perry Oaks S.F. on Nov. 10th may have been the bird present at Queen Mary Res. from Oct. 29th to Nov. 9th (MJR). There was one at Queen Mary Res. on Dec. 20th and 22nd. Inner London had five singletons in spring at three sites and a solitary autumn bird in Regent's Park on Aug. 24th (RCG).

161 Redshank

Although one or two birds were seen during the winter months at five inland localities the flock of 45-50 on Feb. 6th (RFL) at Waltham Abbey Marsh, is unusual and was described as large for the Lea Valley Area. No winter records were received from any of the Thames marshes. All breeding season records are given.

- E Fishers Green G.P., three on May 1st (RFL). Rainham Marsh, two on June 10th (RWB).
- H Broxbourne Pits, one pair bred (PRJA, BSMs). Rye Meads, pair with one young on July 2nd (RMRG). Waltham Abbey, two on Apr. 10th may have bred (RFL). Cheshunt, three on Apr. 8th and one in mid-June (RFL, BSMs).
- M Staines Moor, nest of four eggs on May 29th (WRI). Wraysbury Res., one pair on July 17th were described as "anxious" (WRI). Perry Oaks S.F., one pair bred (CWW).
- K Swanscombe, a "few" on Apr. 11th (PFB). Otford, one pair during April and May (JMH, JGH). Chipstead, one or two pairs during April and May (RVW). Belvedere S.F. two pairs up to mid-May and one pair probably with nest on June 14th (RVW).
- S Beddington S.F. at least three pairs attempted to breed but lack of young was thought to be due to the abundance of Carrion Crows (BRS).

162 Spotted Redshank

- H Rye Meads, one on Aug. 18th (RMRG). Maple Cross, one from Aug. 27th to 29th (JRB, SEC).
- M Perry Oaks S.F., one on July 17th, two on July 20th and one on Sept. 12th (RWB, AP). Queen Mary Res., two on Aug. 17th, 26th and three from Aug. 19th to 21st (GCG, MJR, MJW, CWW). Staines Res., two on Aug. 17th and one on Sept. 9th (CAW, CWW). Staines Moor, three on Sept. 6th, four on the 7th, one on the 8th and 15th (RWB, CAW).
- S Hersham S.F., six from Sept. 6th to 10th (DP) and three on Sept. 12th (CO).

165 Greenshank

The only spring record was one at Perry Oaks S.F. on May 7th (MJW). Two were seen at Staines Res. on June 29th (MC).

In autumn considerably more abundant with records from twenty localities mostly north of the Thames between July 23rd and Oct. 30th and although the maximum was only five at Staines Res. on Aug. 19th, birds were reported in this area almost daily during this month.

166 Marsh Sandpiper

E Chigwell Sewage Works, one on Aug. 26th was the second record for the London Area (GH, SH, KN, WEV). Accepted by the *B.B. Rarities'* Committee.

169 Knot

M Staines Res., one from Sept. 9th to 16th (RWB, MJR, CAW). Queen Mary Res., one on Oct. 2nd (MJR).

171 Little Stint

E Rainham Marsh, two on July 29th (BK, RT) and one on Sept. 4th and 16th (KB).

M Queen Mary Res., one on Oct. 22nd (MJR).

K Swanscombe, one or two on Nov. 21st (FJH).

178 Dunlin

Recorded every month of the year except June and as would be expected more frequent at inland sites during the spring and autumn migrations. The maxima for these two periods were 53 at Perry Oaks S.F. on Apr. 24th (RWA) and *c.* 100 at Rainham Marsh on Aug. 3rd (RT). The largest winter flock reported from the Thames Marshes was one of *c.* 200 at Littlebrook on Dec. 16th (FJH).

179 Curlew Sandpiper

E Rainham Marsh, two on Aug. 5th, one on Aug. 7th and two on Aug. 27th (RES, RT).

M Staines Res., one on Aug. 14th (MJR).

181 Sanderling

H Maple Cross, one on May 5th (IGJ).

M King George VI Res., one on Apr. 17th and 19th and five on May 22nd (RWA, MJR). Queen Mary Res., five on May 18th (MJR) and three flying N.W. plus one feeding on May 22nd (MJR) may be additional to six seen by PFB on the same date. Staines Res., one on May 2nd, two on May 8th and one on Aug. 14th and 22nd (RWB, MJR). Perry Oaks S.F., two on July 20th (RWB).

K Sevenoaks, one on May 22nd (JMH, JGH).

184 Ruff

With the possible exception of the Staines area this species was less in evidence than in recent years. No spring migration was apparent and the autumn maximum numbers were lower. Under county headings all localities are mentioned but some details are summarized.

- E Rainham Marsh, present from July 23rd to Oct. 13th, with up to four regularly, but a peak of 15 in mid-September (RT). Romford S.F., one on July 22nd was the only record received.
- H Maple Cross, one on July 27th and three at Rye Meads on Aug. 28th were the only reports.
- M Perry Oaks S.F. and the nearby favoured sites (i.e. Staines Area), present from January to Apr. 13th with a maximum of 15 on Feb. 6th and from July 20th to the end of December with maxima of *c.* 20 on July 20th and 14 on Dec. 29th (mo). Brent Res., one on Aug. 23rd. Ponders End S.F., two on Sept. 3rd.
- S Beddington S.F., one or two from January to May 1st and one on July 17th (BRS). Hersham S.F., one or two from Sept. 6th to 9th.

193 Arctic Skua

- M Queen Mary Res., two juveniles from Sept. 17th to 22nd were believed to be of this species but an element of doubt was introduced by the finding of a dead juvenile long-tailed Skua on the 26th (see below).
- K Swanscombe, a juvenile chased terns and finally flew off up river on Sept. 18th (AW).

196 Long-tailed Skua

- M Queen Mary Res., one juvenile picked up dead on Sept. 26th was subsequently identified by staff of the Natural History Museum (SG, GW).

199 Lesser Black-backed Gull

Recorded during every month, but fewer records than usual received of the normal spring and autumn passage. Details of some of the larger flocks involved and the maximum winter flock are given below. Inner London: up to nine in the three Royal Parks during all months except June and July. In St. James's Park a pair were seen regularly from Mar. 26th to May 19th and in addition to displaying on three dates their behaviour suggested that a breeding attempt might occur but nothing materialized (AM).

- M Brent Res., *c.* 500 on Mar. 30th and 120 to 190 during August (LAB, JHW). King George VI Res., *c.* 500 arrived from the west during one hour in the late afternoon of Sept. 9th (CAW). Heathrow, *c.* 200 on Sept. 3rd (AP).
- S Barn Elms Res., 128 on Apr. 1st (PJSn). Walton Res., 110 on Apr. 3rd (co). Near Hersham S.F., *c.* 1200 on Aug. 14th (co). Beddington S.F., *c.* 250 on Jan. 12th (ADP).

200 Herring Gull

Although a total of nine birds were present in St. James's Park on Mar. 31st only one pair stayed and even these did not attempt to nest. Of the two nesting pairs in Regent's Park, one pair successfully reared two young. Once again, this time in St. James's Park on Aug. 9th, an adult was seen to kill and eat a young Tufted Duck.

201 Common Gull

The only record of note from the few received was of a flock of 90 at Blackheath in Kent on May 1st (GPR).

202 Glaucous Gull

M Queen Mary Res., an immature on Mar. 30th (MJCD), Apr. 1st (RWA), Apr. 8th (RSB, AG) and May 27th and 28th (MJR). Poyle G.P., an immature on Apr. 3rd (MC). Staines Res., an immature on Apr. 12th (MJR) and Dec. 23rd (RWB).

202/203 Glaucous/Iceland Gull

M East Bedford, one on Mar. 28th (MJR).

207 Little Gull

M Staines Res., two adults on Apr. 17th (MC), two immatures on Aug. 18th and 21st, one adult and two immatures on Sept. 7th (CAW, MJW). Queen Mary Res., one to three immatures from Aug. 19th to 22nd (MC, BAM, MJW), an adult on Sept. 1st (MC), an immature on Sept. 5th, three on the 8th (BAM) and one adult on Oct. 14th (AP).
S Barn Elms Res., an immature on Apr. 6th (PEF).

208 Black-headed Gull

An immature found dead on Jan. 31st at Walton Res., had been ringed at Deeping St. James, Lincs. on Nov. 1st, 1965 (AJC). Again no breeding records were received. The discharge of oil in the Medway in September was thought to be responsible for ten deaths and c. 150 oil polluted birds present at Sevenoaks by the 20th (JMH, JGH).

211 Kittiwake

E King George V Res., a second-winter bird found dead on Feb. 12th (JF, PJV).
M Staines Res., an immature on Mar. 30th was found dead the next day (RWA), an adult flew N.W. on May 26th (RWB) and one adult present on July 24th and 25th (RWB, BEC).
Inner London: Regent's Park, one in the Zoo penguin enclosure for at least nine days from about Mar. 1st (DW).

- S Barn Elms Res., an immature on Mar. 9th (AJC) and an adult on Mar. 13th (PJSn). Beddington S.F., an immature on Dec. 2nd (PJW).

212 Black Tern

The Spring passage of this species was on a small scale with parties of up to four at five localities on eight dates from Apr. 30th to June 1st. Exceptional during this period was a flock of 16 at Staines Res. on May 30th (IGJ).

In Inner London, Regent's Park had a single bird flying N.E. over the Zoo on May 10th (RCG).

With only small numbers appearing at six scattered sites elsewhere, the autumn migration was dominated by observations from Staines and Queen Mary Reservoirs. The first birds, three on July 23rd and two on the 26th, were not followed by others until Aug. 13th, when flocks of up to 16 were seen almost daily until Sept. 6th. After this period only single birds were seen, the last on Oct. 11th.

213 White-winged Black Tern

- M Queen Mary Res., one juvenile on Aug. 27th (MJR). Full details received and accepted by *B.B.* Rarities Committee.

217/218 Common/Arctic Tern

The Spring passage was on a small scale but extended from early April through to the end of May and included a fortnight centred on May 1st when birds were apparently absent altogether. Mid-April records suggest a slight peak at this time with a total of eleven birds at four sites on the 17th and the maximum spring flock was one of 20 at Staines Res. on May 22nd.

During June there were two birds at Staines on the 11th and one (identified as "Common") at Sevenoaks on the 19th and 20th.

The first "autumn" bird appeared on July 1st and by almost mid-August only 14 individuals at five localities had been noted. However, during the rest of August flocks, mainly in the Staines area, totalled 55, 25, 43 and 30 on the 12th, 14th, 22nd and 29th respectively. Very few birds occurred in September at the reservoirs but AW recorded an exceptional flock of about 500 (with one "Black", two "Little" and *c.* 50 Sandwich Terns) at Swanscombe on Sunday the 18th on which date no terns of any species were reported from any other locality. Flocks of this size are not unusual in the estuary, but they do not normally come far enough up the river to enter our Area. The last and only October record was a singleton at Queen Mary Res. on the 20th.

217 Common Tern

- E/H Broxbourne G.P., two pairs bred here and were seen feeding on the nearby Nazeing G.P. and the River Lea throughout the summer (BSMs).

222 Little Tern

- E Walthamstow Res., six on Aug. 21st (RSTJ).
- M Staines Res., one on May 12th (RWB, CWW).
- K Swanscombe, two on Sept. 18th (AW).
- S Barn Elms Res., one on Apr. 27th (RSB, AG). Hersham G.P., two on June 4th (CRAC).

223 Sandwich Tern

- E Walthamstow Res., 20 on Aug. 18th, 20th and 26th (JF, REH).
- M Staines Res., one on May 22nd (RWA), two flying N.W. on May 26th (RWB) and one on Aug. 21st (RWA, RAD).
- K Swanscombe, c. 50 on Sept. 18th (AW).

224 Razorbill

- M Staines Moor, one on the River Colne from Oct. 19th to 24th (RAD, AP).

232 Stock Dove

Breeding season records (Apr. to Aug.) and the largest flocks only are given. Reported from an increased number of localities.

- E Hainault Lodge, three to four pairs bred (ACP). Birds were also reported from Parndon Woods, Epping Long Green and Romford S.F. At Bulphan Fen there were fourteen on Apr. 24th and 20-30 fed on stubble at Fairlop G.P. during April, May and June.
- H No information received.
- M Poyle G.P., one pair on Apr. 5th (RWA). Hampton Court Park, six pairs located, and three pairs in Bushy Park (WRI). Wraysbury New Res., one pair on June 5th and three on July 17th (WRI). Staines Moor, one or two present but twelve on Mar. 1st (CWW). Inner London: Regent's Park, one or two on Jan. 8th, Feb. 20th and Oct. 2nd (RCG). Kensington Gardens, an immature on July 8th and two birds on Aug. 23rd (DB, RFS).
- K Up to three pairs at Sevenoaks, Stone Quarry, Otford, Greenwich Park, Lullingstone, Charts Edge, Hogtrough Hill, Brasted and Woolwich Arsenal. Belvedere, 40 on June 15th (RVW).
- S Present at Norbury Park (three pairs), Richmond Park (three pairs) and Banstead Woods (four pairs). Single birds or pairs also at Ashted Park, Painshill Estate, Downside, Epsom Common, Merstham S.F., South Marden, Marden Park, Ewell and Beddington S.F. Brooklands, ten on Apr. 25th.

234 Wood Pigeon

From the very few records received it appears that no significant hard weather movement of this species occurred over London at either end of the year.

For the second year running a pair bred in an underground car park in Dolphin Square (see *L.B.R.* for 1965). An estimated 80-100 pairs were reported breeding in Greenwich Park and 14 occupied nests were found in Archbishop's Park on May 10th.

The only large feeding flock reported was one of 4-5,000 at Clement Street on Dec. 5th (RVW).

235 Turtle Dove

Records during the breeding season and late summer were received from about twenty localities for Surrey and Kent including flocks of 90 at Green Street Green on May 29th, 55 at Horton Kirby on July 3rd and *c.* 200 at Clement Street on Aug. 27th (RVW). The scarcity of reports for Middlesex, Hertfordshire and Essex is probably due to observers not submitting records.

Groups of two and five on Sept. 6th and 10th respectively in Regent's Park were the only records for Inner London (RCG).

Two late reports were received; one tired bird at Girling Res. and nearby Fishers Green G.P. on Oct. 16th (JCE, BSMs) and one with Wood Pigeons at Headley Court on Oct. 23rd (DP).

Collared Dove

The increase and spread continues unabated. Comparison with 1965 records shows an increase in breeding pairs generally but the spread to new sites appears more marked south of the Thames. Only Inner London and the small area of Bucks are now without breeding records. Birds were often reported throughout the year in most of the main breeding areas though this fact is not mentioned under county headings. The breeding season distribution and maximum numbers are given below.

- E Wanstead, at least one pair bred successfully, maximum of eight birds in January (TEH). Waltham Abbey, three pairs present during the summer (JCE). Brentwood, one pair in September (RBW). Shenfield and Hutton, 10-12 pairs bred, maximum of 70 by December (APS). Valentines Park, six pairs in April (JM). Isolated records of single birds at four other localities.
- H Watford, one pair bred (JRB). Chorley Wood, described as "now well established in the area" (CME). Bushey, one or two present from May to October (JWH). Near St. Albans, two on June 17th (MG, AJ). Isolated singletons from Broxbourne, Cuffley and Bricket Wood during the summer.
- M Feltham, up to four during spring and summer (RAD). Osterley/Heston/Norwood Green/Southall areas, present and can be seen even in the most thickly populated part of Southall on roadways, rooftops and T.V. aerials (CAW). Between Ashford and Staines, "fairly well established" (CWW). Ashford Hospital, at least two from Jan. to June (RWA). Hayes, two pairs nested (AP). Sunbury

area, two pairs, one with nest (WRI). Queen Mary Res., pair in courtship display on Aug. 19th (MJW). Inner London: Regent's Park, two on May 29th and one on Sept. 4th (RCG).

- K Northfleet, one pair with nest (LOC). Bexley, one pair on Mar. 31st, but not subsequently (RVW). Green Street Green, one pair from June to October probably bred (PMW). One or two on isolated dates at Ruxley, Sevenoaks, Down, Otford and Blackfen. Springhead, 14 on Nov. 8th (Littlebrook O.C.). Benels Green, up to seven in Nov. increasing to 15 on Dec. 19th (JMH, JGH).
- S Numerous records from a triangle formed by Epsom, Banstead and Tadworth, including successful breeding and a maximum flock of 117 at the Drift Bridge, Banstead on Sept. 29th (RHBF). Hook/Chessington area, although about ten nests were found many were probably overlooked as *c.* 150 were present at the Zoo on Dec. 30th (SG, WRI). Surbiton, three to four pairs present (CRAC, WRI). Farleigh, 40-50 throughout the year and steadily increasing (LWC, AJH). Birds were also reported (with some possibly breeding) from Walton-on-Thames, West Ewell, Purley, Hamsey Green, Reigate, Sanderstead, Riddlesdown, Carshalton and Worcester Park.

237 Cuckoo

The first bird was reported from Surrey on Apr. 17th and the second from Kensington Gardens (Inner London) two days later. From the 26th onwards an influx occurred in most counties.

From the records received it is almost impossible to describe the breeding distribution as very few observers cared to comment on the species. In Surrey, GHG at Weybridge continues to find the bird scarce particularly after the first birds have passed through. From the rest of the county, reports came from at least seven other localities during the summer. Records for Inner London showed an improvement over 1965. All records are given. Holland Park, one heard in late April and on June 19th (EPB). Kensington Gardens, one on Apr. 19th, May 6th and Aug. 24th (DB, RFS, JW). Victoria Embankment Gardens, two on Aug. 5th (DEM).

241 Barn Owl

Again a slight increase in records which are all given below.

- E Raphael Park, two present throughout the year and from behaviour are thought to have bred (AD). Barking, one pair nested successfully (KB). Hainault Lodge, one adult seen through most of the year (ACP). Gidea Park, one from Sept. 14th to 17th (SRP).
- H Radlett, one pair described as "resident", Jan. to Oct. (EHW). Rye Meads, one on eleven dates from January to August (RMRG). Wormley, one on June 1st (BSMS). Rickmansworth, one on June 4th (MP). Cuffley, one on Sept. 28th (JJ). St. Albans, one on Dec. 2nd (GWM).
- M Mill Hill, one on Feb. 4th and Nov. 26th (EHW).

- K Sydenham Hill, one on Mar. 5th (KAJG). Woolwich Arsenal, one on Apr. 27th (RVW). Magpie Bottom, a "local resident" reported one bird in May and June (RVW).
- S Epsom Common, one pair seen through summer (IRB), Esher, one pair bred in large private garden (IRB). West Ewell, one pair seen throughout the year (IRB). Richmond Park, one pair bred (FGMcC, MG, CES). Ham House, one roosting in grounds until May (GMB-W). Sanderstead, at least one from July to December (LWC). Bookham Common, one on Apr. 24th and at least two from Aug. 19th to 26th (GB, KAJG). Claremont, one calling on several occasions during the year (IRB). Caterham, one on Jan 1st, Feb. 13th and 27th (AFC, AJH). Princes Coverts, one on May 17th (IRB). Farthing Downs, one on Oct. 22nd and 31st (AJH). Addlestone, one on Dec. 16th (GHG). Beddington S.F., one found dead on Dec. 18th (KCO).

246 Little Owl

Reported during the year from all counties (except Bucks and Inner London) at over 40 localities. However, out of a minimum total of 31 probable breeding pairs at 19 sites, Surrey headed the list with at least 16 pairs. Records suggest that this species is still a "common resident in suitable areas" and reports of birds in the breeding season would be welcomed by the recorders to help confirm this fact.

247 Tawny Owl

Reported from all parts of the area and probably breeding successfully. Comments unfortunately were few but encouraging; to EHW the species "appears to be increasing" in the Mill Hill, Hendon and Edgware areas and RFS reports birds in residence at Potters Bar, the first for three years. However, single birds found in an emaciated condition in Greenwich Park on Sept. 4th and 9th, both subsequently died. Records for Inner London are slightly summarized. Holland Park, present throughout the year, but no breeding evidence (EPB), Hyde Park and Kensington Gardens, one or two in Mar., May, Aug. and Oct. and an owlet unable to fly on June 6th (EPB, RHK). Bloomsbury area, one on single dates in Feb., Mar. and June and one during Nov. and Dec. (DB, RHK, RFS). Regent's Park, one pair throughout the year and an owlet found on Apr. 6th (RHK). St. James's Park, one on Nov. 10th (AM).

248 Long-Eared Owl

- S Thames embankment at Petersham, one on Feb. 20th being mobbed by Greenfinches and a Blackbird (DG,GEK).

249 Short-eared Owl

- E Romford S.F., one on Apr. 17th (RRS) and one nearby at East Brook G.P. two days later (KB). Walthamstow Res., one on Dec. 4th (JF).
- S Farthing Downs, one on Oct. 31st (AJH).

252 Nightjar

Breeding season distribution is given.

- E Ongar Park Wood, two pairs located but no young seen (SH, IR, JTS). Thorndon Park, one churring on May 16th (MSF, APS).
- H Broad Riding Wood, at least two males in June and July (BSMs).
- K Joyden's Wood, two pairs on June 12th (AW). Chart's Edge, two churring in June (RVW). Goodley Stock, one on June 1st (RVW). Crockham Hill, one churring in June (RVW). Sundridge, one pair in June and July (RVW).
- S Walton Heath, one pair in June and three on July 9th (MJCd, RSB, JDM). Limpsfield Chart, four pairs at least (CDH, AJH, IGM, DW). Esher Common, one churring on June 5th and 17th, but not subsequently (WRI, PJO). Prince's Coverts, one heard on four dates in May and June (IRB). Headley Heath, one male on July 3rd (RHBF).

255 Swift

The first bird of the spring arrived at Staines Res. on Apr. 18th to be joined by a second bird the next day when there were singles at two other sites. Although numbers built up in the next five days at several localities it was during the first week of May that observers reported birds back in their breeding areas.

EHW records that in a two-storied house at Mill Hill a nesting hole was occupied for the 43rd consecutive year.

Regular watching at West Ewell by IRB produced a peak autumn movement in the area on July 31st with *c.* 1,500 birds moving S.W. between 18.00 hours and 19.00 hours. This was an isolated occurrence but between Aug. 6th and 15th reports from two areas, West Hyde G.P. and Hilfield Res., mention a build-up in numbers to a peak of *c.* 2,000 at each locality on Aug. 12th. On the following day these numbers dropped and at Thorpe the same day GHG noted *c.* 100 per hour moving east at midday and CAW at Southall reported birds flying south all day and on Aug. 14th. At Beddington S.F. around Aug. 15th was considered the main departure time. Five birds were present in three areas on Sept. 1st, 3rd and 4th and the last birds of the season were six flying south over West Ewell on Sept. 13th (IRB).

258 Kingfisher

This species continues to recover and its numbers may be back to those prior to the 1962/63 winter. The increase to possibly nine breeding pairs for the current year from a possible eight pairs in 1965 is slight but sightings through the year were far more frequent. Analysis of the records as a whole suggest that a few birds passed through the area in March and April and a return movement from mid-August through to October with a distinct maximum in September. In Surrey DW ringed no less than seven first-year birds

between Aug. 14th and Sept. 25th (only two in the same period in 1965) at Holmethorpe Sand Pit and Earlswood S.F. (Earlswood S.F. is just outside the L.N.H.S. area).

Breeding records and records suggesting probable breeding are given and also comments relevant to the individual counties.

- E No breeding record this year. River Roding at Chigwell and Abridge, one on Jan. 4th and Apr. 4th respectively. No other records until single birds appeared, at three localities in August, six in September, three in October, two in November and one in December.
- H Cassiobury Park, up to two throughout the year is the only suggestion of a possible breeding pair. Fourteen other records at seven sites add up to more mid-summer observations than any other county (particularly adjoining Essex and Middlesex). So it seems probable that some pairs bred unnoticed.
- M Queen Mary Res., one pair at nesting hole on Apr. 24th (GHG). Apart from this record the pattern for the county was much the same as for Essex. All records were of single birds and mostly in Sept. and Oct.
- K Darenth G.P., one pair bred, and two birds at Sutton-at-Hone on June 11th were possibly this pair (RVW). Sevenoaks, one pair present throughout the year but thought to be infertile again. In June one adult was found dead but the "pair" still present (JMH, JGH). Sundridge, one pair present throughout April (JMH, JGH). Singles on three dates in April at Ruxley and Lullingstone complete the summer records.
- S New Haw and Thorpe, one pair bred successfully at each locality (GHG). Leatherhead, one pair on small private lake from April to June, but no proof of breeding (IRB). River Mole at East Molesey, one pair flying up river on May 1st (LB). Apart from single birds on isolated dates at Brooklands in Apr. and July and two in Richmond Park on Apr. 24th all other records (at eleven localities) fell outside the breeding season.

261 Hoopoe

- E Brentwood, one from Apr. 20th to May 8th (HMCS).
- H Totteridge, one on Oct. 21st (EHW).
- K Littlebrook, two on Apr. 10th (LOC, FJH). Lewisham, one on Aug. 16th (WRE).

262 Green Woodpecker

Probably recovering slowly but still absent in some areas. North of the Thames reported from 24 localities during the summer, but no site had more than two pairs. Pairs bred at Valentines Park, Epping Forest, Brentwood, Bentley Priory, Stanmore Common and Harrow Weald. At Hainault Lodge ACP noted one pair breeding where ten years ago there was a minimum of six pairs. South of the

Thames, the species was reported from only two localities in Kent during the summer which is surely unrepresentative of its status. More widely reported in Surrey with pairs breeding at St. George's Hill, Richmond Park, Nonsuch Park, and probably Wimbledon Common. A complete absence of birds was noted at Sanderstead, Beddington S.F. and Croydon and also at South Nutfield for the first six months of the year.

263 Great Spotted Woodpecker

From the records and comments received, this species' status remains unchanged. At Hainault Lodge ACP noted ten pairs (against six in 1965) and LWC at Sanderstead considered it "to be holding its own". In Kew Gardens LB describes it as "decreased" and RHBf at Burgh Heath only noted one bird in the Jan. to June period. In Kent it would appear to be more common than "Green".

Inner London: Holland Park, one pair present, but no breeding evidence (EPB). Kensington Gardens, one on four dates in July and August (DB, RFS).

264 Lesser Spotted Woodpecker

Reported from at least 70 localities. Breeding pairs or suspected breeding were recorded from Epping Forest, Valentines Park, Brentwood, Bentley Priory, Stanmore Common, Hampstead Heath, Bushy Park, Hayes Common, Sevenoaks, Weybridge, Chertsey, Wey Manor Farm, Richmond Park (three pairs) and Bookham Common. One or two birds were also seen mainly on isolated dates at eighteen other localities in the breeding season.

Inner London: Regents Park, one on Mar. 6th (sc).

265 Wryneck

Present in the breeding season at 7 localities, all except one south of the Thames, classified as follows:

Bred	1 (unsuccessfully)
Probably breeding	1
Possibly breeding	5

In addition there were records of eight other birds, six in spring two in autumn.

269 Short-toed Lark

S Beddington S.F., one on Apr. 24th (ADP, KCO). Only the second record for the London Area. Accepted by the B.B. Rarities Committee.

271 Woodlark

One pair may have bred in Kent (RVW), and one was seen in the same county in June at Joyden's Wood (RJE). Single birds were seen at Limpsfield Chart, Surrey, on Feb. 6th (AJH) and July 3rd (FFBM).

272 Skylark

Very little information received regarding this species. A few reports of movements in autumn, the largest number noted being 64 S.W. in two hours at Thorpe, Surrey, on Sept. 24th (GHG). Recorded in Inner London with some frequency out of the breeding season, the largest number being 25 flying W.N.W. at Regent's Park on Jan. 23rd (RCG).

274 Swallow

The earliest arrival was one at Harold Wood, Essex, on Mar. 24th (RBW). The peak of the spring passage was in the third week of April, when there were 1,000+ at Hamper Mill, Herts, on Apr. 20th and 750 there on the 21st (MP). On the latter date *c.* 600 were seen at King George VI Res., Middx. (cww). Six juveniles seen at Brooklands, Surrey, as early as May 16th were believed to have come from a nest under a bridge over the River Wey (co). There was also a marked peak to the autumn passage, with 1,000+ at Beddington S.F., Surrey, on Sept. 18th (BRS) and 350 the same day at Regent's Park (RCG). Stragglers were noted in November at Walton Res., Surrey, one on the 6th (co), Sewardstone, Essex, one on the 7th (FR), and at Brooklands, Surrey, two on the 9th (co).

275 Red-rumped Swallow

H Hilfield Park Res., one on Oct. 1st (BLS). The second record for the London Area, the first having been as recently as 1964. Accepted by the *B.B.* Rarities Committee.

276 House Martin

First records on Apr. 3rd, two at Ruxley, Kent (FJH), and one at Walton Res., Surrey (MC, DP). No large numbers were reported during the spring passage. A colony of six nests at Harley Road, St. John's Wood, Middx. was the first recorded breeding in Inner London since 1889 (see paper by Stanley Cramp and John Gooders on page 93). During the autumn passage, AP reported *c.* 500 moving S. in 2 hrs 35 mins on July 24th and *c.* 1,500 W. in 3 hrs 15 mins on Aug. 8th at Staines Moor, Middx., and at Queen Mary Res., Middx., *c.* 1,000 W. in 3 hrs 10 mins on Sept. 13th and *c.* 600 W. in 45 mins on Oct. 4th.

277 Sand Martin

The first arrival was one at Fishers Green, Essex, on Mar. 18th (JCE). The largest number reported on the spring passage was *c.* 1,000 at King George VI Res., Middx., on Apr. 21st (cww). Several large colonies were reported in the south of our Area: in Kent, 1,230 pairs at Sundridge, 400 pairs at Chipstead, and 320 and 275 pairs in two areas near Sevenoaks (JGH, JMH); in Surrey, *c.* 500 pairs at Holmethorpe, where *c.* 800 were ringed (DW). Considerable numbers were reported in the Staines area during the autumn passage, with

a maximum of *c.* 8,000 at Staines Res., Middx., on Aug. 11th (BEC). Two recoveries of birds ringed as juveniles at a roost at Thorpe, Surrey, were notified as follows: ringed Aug. 30th, 1965, recovered June 4th, 1966, at a colony at Meole Brace, Shropshire, 130 miles N.W.; ringed Sept. 4th, 1965, recovered May 30th, 1966, at a colony at Kinfaune, nr. Perth, 370 miles N.W.

280 Carrion Crow

M Inner London: bred in St. James's Park, one pair (ABMM), Regent's Park, eight pairs (RCG), Hyde Park and Kensington Gardens, six pairs (RFS) and Holland Park, one pair (EPB); and outside the parks, bred or attempted to breed at Shoreditch (RBW), Euston Square, Gray's Inn, Lincoln's Inn Fields, Coram Gardens and Carlton Gardens (SC), Cornwall Gardens (PSV), Fitzroy Square and Park Square (RHK) and Westminster (ACP).

281 Hooded Crow

E Havering, two in January and February (JEF).
H Stanborough, one on Nov. 10th (PAMD).

282 Rook

E Hainault, a rookery which had *c.* 130 pairs from 1953-1956 is now reduced to two pairs (ACP).
M Inner London: Regent's Park, two on Mar. 3rd, and one to three on four dates from Sept. 19th to Nov. 10th (DJG).

283 Jackdaw

M Inner London: Hyde Park and Kensington Gardens, up to two pairs from Mar. 8th to May 27th but did not breed; one to three from Oct. 11th to Dec. 17th (RFS). Regent's Park, one or two on four dates from Jan. 21st to Mar. 5th and on Oct. 29th (RCG). Lincoln's Inn Fields, one on Aug. 25th (EHW).

284 Magpie

M Inner London: Regent's Park, one or two on Sept. 10th and 16th and Nov. 5th to 7th (REC, RCG, EHW). Kensington Gardens, one on Apr. 6th (RWH).
S Inner London: Battersea Park, two flew over on Oct. 16th (MCLC).

286 Jay

Breeding season records for Inner London are given:

M Inner London: Regent's Park, at least four nesting pairs (RCG). Hyde Park and Kensington Gardens, one pair attempted to breed (RFS). Holland Park, probably two pairs bred; Stanley Crescent Gardens, three, including a juvenile being fed, on July 12th (EPB).



GREAT SPOTTED WOODPECKER

(photographed by M. Hul

288 Great Tit

Breeding season records for Inner London are given.

- M Inner London: Regent's Park, 12 pairs bred; Primrose Hill, two pairs bred (RCG). Hyde Park and Kensington Gardens, twelve territories, at least one nest in base of a lamp post (RFS). Ladbroke Square, a nest on June 16th; Holland Park, bred successfully (EPB). Bloomsbury, a pair in Brunswick Square on June 2nd and 10th, and a pair with four young in Russell Square on June 15th (EHW). St. George's Square, one or two young being fed by parents on June 12th (MCLC).
- S Inner London: Battersea Park, two juveniles being fed by parent on June 19th (MCLC). Lambeth, a pair in Archbishop's Park in April and May (GHG).

289 Blue Tit

Breeding season records for Inner London are given.

- M Inner London: Regent's Park and Primrose Hill 18 broods seen (RCG). Hyde Park and Kensington Gardens, 22 territories, at least four nests in the tops of lamp posts (RFS). St. James's Park, at least one pair bred (ABMM). Holland Park, bred successfully; four known nests (EPB). Bloomsbury, a pair bred in Russell Square, and possibly another in Gordon Square (EHW).
- S Inner London: Battersea Park, several broods of young seen and heard (MCLC). Lambeth, a pair with five juveniles on May 30th (GHG).

290 Coal Tit

Several reports of birds being seen from October onwards in areas where they are rarely noted suggest that there was an influx in the autumn.

Breeding season records for Inner London are given.

- M Inner London: Regent's Park, one pair probably bred (RCG). Hyde Park and Kensington Gardens, two territories; one pair reared five young (RFS). Holland Park, one pair bred successfully (EPB).

292 Marsh Tit

- M Inner London: Hyde Park and Kensington Gardens, one on Oct. 13th and 26th (DB, RFS).

293 Willow Tit

Breeding season distribution.

- E Ongar, adults heard during spring and summer, and two juveniles ringed (DMEU). Parndon Woods, at least two pairs bred (HPM).
- H Cuffley, a pair nested unsuccessfully (JJ). Nyn Park, Northaw, one during May (TJ). Hilfield Park Res., a pair near the aerodrome from March to September (EHW).
- M Mill Hill, one pair (EHW). Potters Bar, a pair nested in a dead willow tree (JD). Scratch Wood, one or two pairs (EHW).
- K French Street, six on June 12th (PMW).

- S Banstead Wood, a pair on Apr. 29th (WRI). Bookham Common, two on Mar. 13th, one on Apr. 17th, four or five on July 10th (GB, WRI). Farthing Down, two on Mar. 20th, one on May 25th (AJH). Prince's Coverts a pair with fledged young and two others heard on June 12th (WRI). Selsdon, two on May 1st (KDG M). Walton Heath, on May 12th one pair nest building and another bird nearby; the nest was later destroyed (ADP).

294 Long-tailed Tit

Now that this species has recovered from the effects of the 1962/63 winter fewer observers seem to be submitting records. WRI from Surrey reported that he found eighteen nests and considered that breeding numbers were almost back to the pre-1962/63 level. GB gave the following comparative figures of the number of pairs in 120 acres of grassland and thick scrub at Bookham Common:—

1961	1962	1963	1964	1965	1966
6	5-6	1	2-3	4	4

295 Bearded Tit

For the first time since 1959 none were reported in the autumn. All records are given.

E Rainham, six on Jan. 6th (PRD, GAF).

H Rye Meads, six on Jan. 6th, two on the 8th (RMRG). Old Parkbury, c. 2 calling on Jan. 30th (EHW).

296 Nuthatch

M Inner London: Holland Park, a single bird throughout the year except during the period June 8th to July 9th (EPB). Hyde Park and Kensington Gardens, one or two from Feb. 1st to May 4th (RFS).

298 Tree Creeper

M Inner London: Holland Park, recorded frequently from Jan. 2nd to Feb. 5th (EPB). Hyde Park and Kensington Gardens, one on Aug. 10th (DB). Regent's Park, three including a juvenile on Sept. 6th and 8th (RCG).

299 Wren

Comparative figures of the number of singing males in 40 acres of dense oakwood at Bookham Common, Surrey, given by GB are as follows:

1961	1962	1963	1964	1965	1966
17	12	1	5-6	11	17

Breeding season records for Inner London are given.

M Inner London: Holland Park, bred successfully; four or five singing males (EPB). Hyde Park and Kensington Gardens, no attempt to breed, although successful breeding had occurred for the past five years (RFS). Regent's Park, at least eight breeding pairs, but only four broods seen (RCG).

- S Inner London: Battersea Park, a pair nested beside a public footpath; young were seen on June 4th, but on the 11th the nest was found stripped (MCLC).

301 Mistle Thrush

Breeding records for Inner London are given.

- M Inner London: Green Park, a pair present but not known whether they bred (ABMM). Holland Park, attempted to breed but not seen after the end of May (EPB). Regent's Park and Primrose Hill, 10 pairs in breeding season, and nine broods seen (RCG). Hyde Park and Kensington Gardens, four territories and at least one pair successful (RFS). St. James's Park, one pair bred (GHG, ABMM). St. George's Square, a pair tried to breed but were ousted by crows (MCLC).
- S Inner London: Lambeth Palace, a pair feeding young on May 6th (GHG).

302 Fieldfare

During the first four months of the year flocks exceeding 100 were reported from thirteen localities. Numbers were largest in January with flocks of 400, 300, 285, 200 and 150, and during the return migration in the first ten days of April, with flocks of 800, 250 and 250. In February and March no flock exceeded 150. None were seen after April 26th. The first arrival of the autumn was one at Beddington S.F. on Sept. 11th, but it was not until the second half of October that they were at all numerous. There was considerable passage, especially on Oct. 25th, 26th, 29th and 30th, the numbers reported for these dates totalling some 2,500 birds. By December the population was probably greater than at any other time during the year, and included two flocks of 250, one of 500 and, the largest of the year, 1,000 at Horton Kirby on Dec. 5th.

303 Song Thrush

Breeding records for Inner London are given.

- M Inner London: Holland Park, 6-8 pairs bred (EPB). Hyde Park and Kensington Gardens, 26 territories; several pairs seen with young (RFS). Regent's Park, 37 broods reported (RCG). St. James's Park, at least three breeding pairs (GHG).
- S Inner London: Lambeth Palace, two breeding pairs (GHG).

304 Redwing

At the beginning of the year, although the largest individual flock, 500, was greater than for Fieldfare, fewer large flocks were reported, and it is probable that the total population was smaller than Fieldfare. Also there was no marked increase at the time of the return migration. The last seen was on Apr. 30th. The first arrivals of the autumn were on Sept. 17th. A considerable passage movement

developed on Oct. 5th: *c.* 850 flew W. at Brent Res., a large movement S.W. was noted at Great Parndon, and many were heard calling after dark at Potters Bar, Kingston Vale, Thames Ditton and Walton on the Hill. Subsequent movements were on a small scale, and the population lower than Fieldfare, with a maximum of 300 at Beddington S.F. on Dec. 31st.

307 Ring Ouzel

- E Epping Forest, West Essex Golf Course, an immature on Oct. 13th and an adult male on Nov. 2nd (FR). Havering, two Oct. 6th, three on the 7th and 8th and one on the 13th (JTS, DELW).
- M Queen Mary Res., a male on Oct. 7th and a female on Oct. 18th (MJR).
- K Chart's Edge, two on Oct. 2nd (RVW). Greenwich Park, two on Apr. 5th, and a male on Apr. 20th and 21st and May 10th (GPR). Longfield, a male on Apr. 20th and 21st (EFA).
- S Beddington S.F., a male from Oct. 9th to 18th (KCO, BRS, PJW). Caterham, a male on Sept. 24th and Oct. 1st, and two males on Oct. 8th (TGF). Ewell, three on Oct. 5th (EDU). Farthing Down one on Oct. 8th (AJH).

308 Blackbird

Breeding records for Inner London are given. No doubt others bred unrecorded.

- M Inner London: Holland Park, bred successfully (EPB). Hyde Park and Kensington Gardens, at least 60 territories; a very successful breeding season (RFS). Regent's Park, up to 125 nesting pairs (RCG).

311 Wheatear

One at Barn Elms Res. on Mar. 21st was the first arrival. The maximum at any locality for the spring passage was nine at Beddington S.F. on Apr. 25th. Most birds had left by mid-May, but there was an isolated record at Barn Elms Res. on June 4th. One at Hershams S.F. on July 16th marked the beginning of the return passage which reached its peak at the end of August and beginning of September, the largest number at any locality being 15 at Beddington S.F. on Aug. 28th. The last recorded was one in the Lea Valley on Oct. 23rd.

317 Stonechat

Records of one or two from 15 localities out of the breeding season, an increase over 1965. Breeding season records are given below.

- S Epsom Common, a pair with one juvenile on May 28th, a male singing on May 31st and one pair on June 26th (PCn, EDU). Wey Manor Farm, a hen throughout April left in early May (GHG).

318 Whinchat

Frequent on passage from Apr. 20th to the end of May, and from August to Oct. 2nd. Three occurrences of single birds in June and July away from breeding localities. Breeding records are given below.

- M Staines Moor, two pairs bred, at least one successfully; a third pair may have bred (RWB, CWW).
- K Woolwich Arsenal, three pairs bred; one nest found (RVW).

320 Redstart

The first arrival was a male at Bushy Park on Apr. 2nd. In the autumn most birds had left the area by the beginning of October, but a first winter male was killed by a cat at Dulwich on Nov. 1st (JG). Records of breeding and of apparently resident birds are given.

- E Brentwood, one pair bred (HM). Epping Forest, twelve pairs (JCE, REH, BSMs, FR).
- H Northaw Great Wood, 15-20 pairs (TJ).
- M Trent Park, one pair bred (EHW).
- K Chart's Edge, six pairs bred (RVW). Chartwell, a pair on May 1st (PMW). Squerryes Court, a male and two females on June 12th (PMW).
- S Ashted Forest, a pair with recently fledged young on June 11th (WRI). Esher Common, a pair with recently fledged young on June 17th; probably at least one other pair present (WRI, PJO). Limpsfield Chart, ten pairs on June 4th (DW). Richmond Park, 2-3 pairs bred (CES). Weybridge, a singing male at St. George's Hill on June 8th (WRI).

321 Black Redstart

Only eight pairs are known to have bred, compared with 11 in 1965 and 13 in 1964 (corrected figures for both years—see Additions and Corrections, page 63). In spite of building operations, a pair nested successfully in the Cripplegate area.

- E Chingford, a female on Feb. 5th was not seen subsequently (BSMs). Bromley-by-Bow Gas Works, a male on June 1st (BSMs). Walthamstow, up to eight adults and young in July and August came from the breeding area at Tottenham Gas Works (BSMs). Stratford, a male on Aug. 4th appeared to be carrying food into a warehouse at Three Mills Lane, but no female or young were seen (BSMs). King George V Res. pumping station, one on Aug. 20th and Sept. 24th (JF). Leyton, an immature male at Lea Bridge Road on Oct. 5th (BSMs). Walthamstow Res., one on Aug. 22nd and two on Sept. 29th (REH, RSTJ). Dagenham Docks, a male in May and on June 28th and July 1st (DRB). Epping Forest, a female on a ploughed field on May 1st (JCE). Havering, a male on Oct. 15th (JEF).
- H St. Albans, one singing from the cathedral on Sept. 22nd (EHW).

- M Tottenham Gas Works, three pairs bred (BSMs). White City, one pair bred (DWH). Hampstead, a male at Kenwood House on Oct. 15th. Inner London: Cripplegate area, three males located, and a nest with three fledglings found on July 23rd (BSMs). Bloomsbury, one singing at Brunswick Square on Apr. 27th was not heard subsequently (EHW). Gough Square, a pair from early July to early November (HGM). Poplar, a pair again nested in a wool warehouse (HM).
- K Littlebrook, a pair bred (LOC). Woolwich Arsenal, a male on July 14th (TC), and one in a different area on July 20th and 29th (TJW).
- S Croydon Power Station, at least one pair bred successfully (ADP). Croydon, a male singing at Fairfield Hall on May 1st was not seen subsequently (EMS). Beddington S.F., a female on Oct. 8th and 23rd (KCO). South Norwood lake, a female on Oct. 16th (JAW). Kingston, a male singing from the roof of a store on May 14th (SM). Thorpe, an immature male on Apr. 30th (GHG). Inner London: Southwark, one singing on a number of dates from May 2nd to 31st (IGM, CS).

322 Nightingale

Records of breeding and of birds singing in May and June, except those which were obviously migrants, are given.

- E Hainault Forest, a pair on June 17th, their worried, noisy, behaviour suggested breeding (KN). Parndon Woods, one singing on May 14th (HPM). Wanstead Park, two singing on May 13th (NJL).
- H Broxbourne Woods, seven singing males on May 10th (BSMs); three nests found May 17th to 20th (PRJA). Cheshunt pits, one pair bred (PRJA). Northaw Great Wood, at least five singing males (TJ).
- K Keston, a pair at Highams Hill on June 4th, but the area subsequently destroyed (EWR). RVW reported singing birds at Brasted and The Birches in May, and commented that none were seen at three former haunts.
- S Barrow Green, one singing on May 15th (AJH). Ashted Forest, two singing during the summer (IRB). Bookham Common, at least two singing males in May (GB). Prince's Coverts, *c.* ten pairs in May and June (IRB, WRI).

325 Robin

Breeding records for Inner London are given.

- M Inner London: Holland Park, bred successfully, 10-12 pairs (EPB). Hyde Park and Kensington Gardens, 14 territories; at least two pairs with young (RFS). Regent's Park, 20 pairs in the breeding season (RCG). St. James's Park, at least one pair bred (ABMM).
- S Battersea Park, one juvenile being fed by parents on May 21st, and a second juvenile heard (MCLC).

327 Grasshopper Warbler

Breeding season records are given. Migrants recorded from eight other localities.

- E North Weald, one singing in July was trapped and ringed on the 31st (JM, BMEU).
- H Broxbourne Woods, six singing in May (PRJA). Goff's Oak, one singing in May and June (JL). Nyn Park, Northaw, one singing in May and June (TJ). Rye Meads, one from Apr. 29th to June 30th (RMRG).
- K Knockholt, a pair in May; Sevenoaks, two pairs in May, one of which subsequently reared five young (JGH, JMH). High Elms Estate, one or two singing from Apr. 29th to May 28th (PMW). Shoreham, a pair in May (JGH, JMH). RVW reported singing birds at the following localities: The Birches, two on June 15th; Timberden Bottom, two on May 23rd; Shepherds Barn, one on June 3rd; Lett's Green, one on June 1st, three on June 12th; nr. Kemsing, three on June 9th, four on June 18th and three on July 7th; Knatts Valley, one on June 2nd and 8th; nr. Sundridge, two on June 3rd, three on July 2nd.
- S Ashted Common, five singing on May 31st, two pairs on June 11th, two juveniles on July 22nd (WRI). Bookham Common, six singing during the summer; the highest number in the last 30 years (GB). Chelsham, one singing at Holt Wood from Apr. 24th to May 26th (IGM). Epsom Common, two singing on May 31st (EDU). Esher Common, a pair on June 17th; *c.* six singing on July 11th (RA, WRI). Headley Heath, one seen and heard on July 3rd (JAF, RHBF). Prince's Coverts, up to four singing from late April (IRB).

333 Reed Warbler

At least one pair bred again at the pond at Barn Elms Res. less than a mile from the Inner London boundary.

334 Marsh Warbler

- S Nr. Walton Res., one trapped and ringed on July 9th (CO).

337 Sedge Warbler

- M Inner London: Cripplegate area, one on Sept. 30th (RBW). Hyde Park and Kensington Gardens, one on Apr. 27th, two on May 2nd and one on May 19th (DB, JW).
- S Inner London: Battersea Park, one on May 15th (MCLC).

338 Aquatic Warbler

- M Queen Mary Res., one on Aug. 20th and 21st (DMP, MJR). Accepted by the *B.B.* Rarities Committee.

343 Blackcap

Records on two unusual dates and for the breeding season in Inner London are given.

- M Inner London: Holland Park, one pair bred successfully (EPB). Hyde Park and Kensington Gardens, two territories, but breeding not proved (RFS *et al.*). Hammersmith, one singing in the garden of 6 Colet Gardens from Mar. 1st to 10th (Mr. Hansford, EPB).
- S Beddington S.F., a male trapped and ringed on Dec. 4th (KCO).

346 Garden Warbler

- M Inner London: Holland Park, one on May 24th (EPB). Hyde Park, one on May 17th (DB). Regent's Park, one or two on eleven dates April to June and August and September (RCG).

347 Whitethroat

- M/S Inner London: one or two reported in the parks and the Cripplegate area on eight dates from Apr. 23rd to May 12th and 20 dates from Aug. 4th to Oct. 4th. One was heard calling in the grounds of Buckingham Palace on July 7th (EHW).

348 Lesser Whitethroat

Only ten pairs were located in the Cuffley/Northaw area of Herts. compared with 15 singing males in 1965. Also GAMB reported this species considerably less common in N.W. Middlesex than in 1965. However reports of breeding were widespread, particularly in Surrey, and at Parndon Woods, Essex, at least six pairs bred successfully within $\frac{1}{4}$ square mile of the observer's house, and several others were frequently heard during the breeding season just outside this area (HPM).

All Inner London records are given below.

- M Inner London: Hyde Park and Kensington Gardens, one on Apr. 26th and May 6th (DB, RFS, JW). Regent's Park, single birds on Apr. 27th and on eleven dates from May 2nd to 27th (RHK, RCG); 1-3 on eighteen dates from Aug. 9th to Sept. 18th (RCG).

354 Willow Warbler

The first arrival was one heard singing at Peckham on Mar. 20th, an early date (BJS). In Inner London, apart from the usual passage migrants, two sang in Holland Park from Apr. 28th to June 8th (EPB) and one in Hyde Park for about four weeks in the spring (RFS). In Hyde Park and Kensington Gardens the autumn passage from July 14th to Sept. 2nd was heavy, with birds present almost continually. The maximum was 22 on Aug. 4th, and double figures were recorded on six dates between Aug. 4th and 19th (RFS).

356 Chiffchaff

The first arrivals were very early, singles at Waltham Abbey, Essex (APS), and Lonsdale Road and Walton reservoirs in Surrey (ADT, CO), all on Mar. 6th, and in the next ten days there were records for twelve other localities. At the end of the season, most had left by mid-October, but there were three stragglers on Nov. 4th and one on

Nov. 9th. On Dec. 4th a "Willow/Chiff", seen at Beddington S.F. (JD, BRS) was probably of this species, and on Dec. 20th one was seen and heard on the Serpentine island in Hyde Park.

357 Wood Warbler

In view of the difficulty in deciding whether isolated records in spring refer to birds establishing territories or to passage migrants, all records are given. It would be of assistance if observers who note the absence of birds on subsequent visits would include this information when submitting their records.

- E Epping Forest: a pair at Warren Wood on June 3rd and 5th are believed to have bred (DIMW); two singing throughout June at High Beech, but no evidence of breeding (JF, REH); two singing males at Loughton on May 26th and one on the 27th (BMEU).
- H Northaw Great Wood, four singing on June 1st (LKW). Nyn Park, Northaw, one on Aug. 24th (JPW). Ponsbourne Park, one singing on June 1st (TJ).
- M Bushy Park, one singing on Apr. 30th, May 1st and 8th (GB, WRI, MJW). Harrow Weald Common, two singing males in May (GAMB). Ruislip Woods, one singing on June 11th (HJF). Stanmore Common, one singing in May not heard after the end of the month (GAMB). Inner London: Holland Park, one on May 11th (EPB). Regent's Park, one on May 18th, July 29th and 31st, Aug. 14th and Sept. 13th (RCG).
- B Black Park, two seen and heard singing on May 10th (CAW).
- K Brasted Chart, two on June 5th (RVW). Greenwich Park, one on Aug. 19th (GPR). Hayes Common, 1-2 singing on May 15th (AWB). Shoreham, two on May 1st, a pair on May 13th and one on May 26th (PMW, RVW).
- S Arbrook Common, one singing on May 11th (WRI). Clapham Common, one on Aug. 2nd (MB). Brooklands, a passage bird on Apr. 29th (CO). Fairmile Common, one singing on June 1st was not seen on June 15th (WRI). Kingswood, two singing on May 15th (RHBF). Limpsfield, two pairs at least on June 4th; one nest found (IGM, DW). South Marden, one or two on four dates in May (AJH).

364 Goldcrest

Commoner in late autumn and winter than in the breeding season, all records for which are given. All breeding season records would be welcome.

- E Reported by DIMW to have bred in Warren Wood, Epping Forest.
- M Bushy Park, one pair with nest in a fir tree on Apr. 30th (WRI).
- K Chart's Edge, one pair on May 15th; French Street, one pair feeding young out of nest on July 25th (RVW). Otford, seen and heard during breeding season (HFG). Sevenoaks, three pairs located in April (JGH, JMH).
- S Ashtead, a nest found in the churchyard on May 9th (WRI): one singing about half a mile away on June 19th (PJSn). Manor Park,

nr. Caterham, one singing on May 4th (WRI). Limpsfield Chart, one on June 25th (AJH). Newchapel, one singing on June 19th (AJH).

365 Firecrest

E Romford S.F., one trapped and ringed on Oct. 8th (RRS).

366 Spotted Flycatcher

Daily counts at Highams Park, Essex during the autumn passage (July to September) produced a total of 221 presumed migrants compared with 70 in 1965 (HBF).

Breeding records for Inner London are given.

M Inner London: Holland Park, two pairs bred successfully (EPB). Hyde Park and Kensington Gardens, eight territories all with young; three nests found (RFS, JW). Regent's Park, twelve broods seen from ten breeding pairs; 29 young fledged (RCG).

368 Pied Flycatcher

Only one record in spring, a hen at Clapham Common on May 5th (MB). Recorded from 22 localities on the autumn passage, almost daily from Aug. 19th to Sept. 21st, and one on Sept. 26th and 27th, the maximum being six at Havering, Essex, on Aug. 21st.

M Inner London: Hyde Park and Kensington Gardens, 1-3 from Sept. 1st to 7th, one Sept. 26th and 27th (DB, PEF, RFS, JW). Regent's Park, recorded on thirteen dates from Aug. 19th to Sept. 16th, maximum three (RCG).

S Battersea Park, one on Aug. 20th (MCLC).

371 Hedge Sparrow

Breeding records for Inner London are given.

M Inner London: Holland Park, common, bred successfully (EPB). Hyde Park and Kensington Gardens, 16 territories, young seen (RFS). Regent's Park, up to 50 breeding pairs, (RCG). St. James's Park, several pairs bred (ABMM). Bloomsbury, a pair bred in Gordon Square, at least two young reared (EHW).

S Inner London: Lambeth, one pair had two broods in Archbishop's Park (GHG).

373 Meadow Pipit

All records to establish the present breeding distribution of this species would be welcome. A few comments on the spring passage were received: 37 in Regent's Park on Mar. 28th (RCG); a very heavy passage N. at Staines reservoir on Mar. 30th (RWA), and *c.* 100 roosting at Prince's Coverts on the same day (DP); 100-110 in one flock at Hilfield Park Res. on Apr. 3rd (BLS).

376 Tree Pipit

The breeding distribution of this species needs bringing up to date and all records to establish it would be welcome. Records of birds singing in spring should be qualified wherever possible to indicate whether the bird was a resident or a passage migrant.

Inner London records are given.

- M Kensington Gardens, one on Aug. 9th (DB). Regent's Park, one on Aug. 25th and Sept. 6th and 18th, two on Sept. 7th (RCG).

379 Rock and Water Pipits

All records of Rock Pipits (*petrosus*), and of birds considered by the observers to have the characters of the Water Pipit (*spinoletta*) are given. In most cases details are not available to show whether some of the latter may be *littoralis*. (See Moults and its relation to taxonomy in Rock and Water Pipits by Kenneth Williamson, *B.B.*, 58, 493 to 504).

- E Lea Valley reservoirs, Rock Pipits on Oct. 23rd and 29th and Nov. 12th and 26th (JF). King George V Res., a Water Pipit on Apr. 16th (JF).
- H Hilfield Park Res., one Rock Pipit on Oct. 1st (BLS). Rickmansworth area, BLS summarizes the reports of Water Pipits as follows: records too numerous to enter in detail; present from beginning of year until Apr. 4th, with the maxima present at any one time *c.* 13 on Jan. 16th at four sites, and eight on Jan. 23rd at four sites; re-appeared on Nov. 20th and present until the end of the year, maximum four at three sites on Nov. 28th.
- M Rock Pipits: Perry Oaks S.F., one on Oct. 1st (MJR); Ponders End S.F., one on Dec. 4th (JF); Queen Mary Res., singles on Mar. 22nd, Sept. 29th and Oct. 15th (MJR, MC); King George VI, Staines and Queen Mary reservoirs, singles on 16 dates from Sept. 28th to Dec. 29th (MJR).
- K Swanscombe, two Rock Pipits on Nov. 2nd (FJH).
- S Barn Elms Res., single Rock Pipits on Jan. 22nd (RSB), and Sept. 25th, Oct. 16th and 23rd (PJSn). Beddington S.F., Rock Pipits; one or two on Oct. 30th and 31st, Nov. 6th, 7th and 13th; Water Pipits: one on two on six dates from Jan. 4th to 22nd, one on Mar. 2nd, one on Mar. 15th and 16th (considered by ADP probably *littoralis*), singles on Oct. 23rd and 26th, and Nov. 13th, two on Dec. 6th and one on Dec. 9th (mo).

380a Pied Wagtail

Breeding season records for Inner London, and details of a roost on a building are given.

- H Hoddesdon, roosting on the roof of the boiler house at Rye House generating station developed in mid-November, and continued until mid-May 1967; the maximum was 183 (MJB).

- M Inner London: Hyde Park and Kensington Gardens, one territory but breeding not proved (RFS). Regent's Park, a pair in April and May suspected of breeding near Winfield House (RCG).
- S Inner London, Lambeth, two pairs fed regularly in Archbishop's Park April to June but it is not known whether they bred in the vicinity (GHG).

380b White Wagtail

- E Lea Valley reservoirs, one or two on six dates from Apr. 16th to 30th (JF).
- M Queen Mary Res., one on Mar. 30th (RWA). Staines reservoirs, one to four from April 13th to 19th, 10+ on Apr. 23rd (RWA, MJR).
- S Beddington S.F., singles on Mar. 5th and 20th and Apr. 3rd, up to four from Apr. 13th to 17th, and up to five from Apr. 24th to 29th (RSB, KCO, ADP, BRS).

381 Grey Wagtail

Breeding season records are given. Widespread in small numbers at other times.

- H Hamper Mill, a pair feeding young on July 28th (MP).
- B Denham, a pair on Apr. 26th (CAW).
- K Chart's Edge, a nest with three young on May 16th; French Street, 1-2 at last years breeding site in April and May (RVW).
- S Carshalton, one pair bred unsuccessfully (LWC). Cobham, a pair on June 5th were probably breeding under the bridge (GCG). Leatherhead, a pair nested under the bridge for the fourth year running (WRI).

382 Yellow Wagtail

All comments bearing on the breeding distribution are given. Further records would be welcome.

About twelve birds having characters of races other than *flavissima* were reported, three of which were considered by the observers to be *flava*.

- E Lea Valley, still breeds in all suitable areas from West Ham to Stanstead Abbots (BSMS). Fairlop G.P., 7-8 pairs during the breeding season, several of which successfully reared young (ACP).
- H Broxbourne pits, six pairs with eggs, two building nests and four other pairs on May 15th (PRJA). Cheshunt pits, two nests found in May (PRJA). Helicon G.P., a pair on June 9th (MP). Hilfield Park Res., a pair all summer (GHMB). Maple Cross, a pair with five young on July 17th (AEG). Springwell, a pair on May 28th (MP).
- M Wraysbury Res., 3-4 pairs, two of which had two broods (WRI).
- K Belvedere, several pairs on May 20th; Green Street Green (between Darenth and Longfield), one pair bred in a cabbage field (RVW).
- S Beddington S.F., early breeding attempts were foiled by flooding and the presence of too many cattle; three juveniles on June 19th (KCO). Molesey Res., one seen carrying food on June 16th (WRI).

383 Waxwing

Following the irruption at the end of 1965, birds were widespread at the beginning of the year. Records are too numerous to detail, but for each county is given the number of localities, the maximum number, and the last date seen. For the area as a whole the last record was on May 1st. Food recorded was apples, Cotoneaster berries, Rose hips and Hawthorn berries.

- E Five localities; maximum ten at Buckhurst Hill at the end of February and early March (JAL); last seen, one at Chingford on Mar. 12th (PFB).
- H Seven localities; maximum *c.* 30 at St. Albans on Apr. 5th (EJW). last seen on Apr. 25th at St. Albans (EJW).
- M Eight localities; maximum 40-50 at Ashford on Feb. 14th and 15th (FW); last seen, 11 at Stanmore on Apr. 9th (Beryl Lloyd per EHW).
- K Seven localities; maximum 30 at Otford on Feb. 16th (JGH, JMH); last seen, two at Honor Oak on Apr. 11th (BJS).
- S Fifteen localities; maximum 17 at Shelveys Way, Tadworth, on Mar. 19th (MB); last seen, one at Burgh Heath on May 1st (RHBF).

384 Great Grey Shrike

- E Epping Forest one on Jan. 1st (DIMW). Waltham Abbey, one on Dec. 4th (JCE).
- H Cheshunt, one on Dec. 26th (RCE). Panshanger Park, one on Oct. 17th and 30th (BLS, MPB).
- M Bentley Priory, one on Jan. 4th (HFH).
- K Ruxley, one on Nov. 12th (PJD, DM).
- S Caterham, one on ten dates from Jan. 9th to Apr. 4th (AFC, TGF, AJH); one about two miles away, but probably the same bird, on Apr. 24th (AFC). Walton Heath, one on Feb. 6th (RCH).

388 Red-backed Shrike

All records are given. The reduction in the breeding population continues.

- E Shenfield, a male on May 20th (MM).
- H Helicon G.P., a male on Aug. 9th (JRB).
- M Inner London: Regent's Park, an immature male on Sept. 18th (RCG).
- K Magpie Bottom, a male on May 28th; Otford, a male on May 23rd and 29th believed to have stayed (HFG).
- S Banstead, a male on June 25th (DW). Caterham, a pair with a juvenile on July 24th, a male on July 31st, two with a juvenile on Aug. 13th, two distinct broods (TGF). Leatherhead, a male on May 19th (GMC).

389 Starling

During a brief cold spell in January, *c.* 350 flew W. at Kingston Vale on the 18th (BAM) and 3,350 W. at Tooting Bec Common in 40 minutes on the 19th (RSB). The only records for the autumn passage

were 1,000 per hour flying W. soon after dawn at Sevenoaks on Oct. 29th (JGH, JMH), and small numbers at Primrose Hill on that and the following day (RCG).

Some breeding records for Inner London are given below. For comparison, it was estimated that 200-250 pairs attempted to breed in Greenwich Park in the inner suburbs (GPR).

- M Inner London: Holland Park, common and bred successfully (EPB). Hyde Park and Kensington Gardens, twelve nests found, but it is certain that a few more pairs bred unseen (RFS). Regent's Park and Primrose Hill, up to 50 breeding pairs (RCG). Fitzroy Square, two or three pairs nested in trees (RHK). Cripplegate, a hen feeding two young on a bomb site on May 27th (SM).

391 Hawfinch

Breeding season distribution and records for Inner London are given.

- E Epping Forest, a juvenile not capable of sustained flight solicited food from the observer on June 3rd (DIMW). Parndon Wood, one pair bred successfully (HPM). Weald Park, two on May 16th (MPT).
- H Cuffley, a pair with young in mid-June (TJ). Northaw Great Wood, a pair on Apr. 21st (TJ). Nyn Park, Northaw, one on Apr. 23rd (TJ). Rickmansworth, one on May 11th (MP). West Hyde, one on Apr. 30th (RPC).
- M Bentley Priory, a pair on May 1st (EHW).
Inner London: Regent's Park, a female on Apr. 22nd and a male on July 16th (RCG).
- K Sevenoaks, a pair on Apr. 13th (JGH, JMH). The Birches, a pair on Apr. 25th (RVW).
- S Addlestone, two on May 8th (GHG). Caterham, one at Manor Park on May 4th, but none seen on June 10th (WRI). Bookham Common, two on June 12th (DVF). Farthing Down, one on May 1st, 8th, 15th and 19th (AJH). Kew Gardens, two or three pairs on Apr. 26th, one with nest in pear tree (WRI). Reigate, two or three pairs at The Priory; one nest found (WRI). South Marden, two on Apr. 30th, one on May 7th (AJH).

392 Greenfinch

Flocks exceeding 300 fed daily on sunflower seeds in a small garden at Weybridge during a short spell of severe weather from Jan. 14th to 18th (GHG). At Sanderstead in a $\frac{1}{4}$ acre garden over 120 were trapped from Jan. 1st to Apr. 24th, and in a larger garden over 200 were feeding on Feb. 26th and Mar. 19th (LWC).

Breeding season distribution in Inner London is given below.

- M Inner London: Holland Park, present in small numbers and probably bred (EPB). Hyde Park and Kensington Gardens, twelve territories, young seen in two of them (RFS). Regent's Park, ten broods seen (RCG). Bloomsbury, a singing male, mostly in Gordon Square, from February to July (EHW). Lincoln's Inn Fields, 2-3 from Mar. 4th to July 17th but no proof of breeding (sc).

S Inner London: Battersea Park, three pairs one of which is known to have bred (MCLC). Lambeth, two pairs present in May and June (GHG).

393 Goldfinch

Records of roosts and breeding in Inner London are given.

M Inner London: Regent's Park: at the Baptist College sanctuary six broods totalling eleven young were seen (RCG). The roost referred to in the *L.B.R.* for 1965 was in use by two or three birds on Feb. 10th, 11th and 22nd (WR). Another roost was found in Warwick Square on Mar. 10th when 20 birds were seen dropping into a small evergreen tree; when the first full count was made on the 22nd 50-60 were using the roost. These numbers were maintained until Apr. 29th when there were only 20 and none were seen after the 30th. In the autumn *c.* four on Nov. 26th was the first record, and numbers had increased to *c.* 20 by Dec. 31st. The birds assembled in high plane trees before settling in to the roost about half an hour before sunset; in the morning they flew up into the plane trees to sing and preen before dispersing in small parties just before sunrise (JMS).

394 Siskin

Widespread and common at the beginning of the year, with numbers probably similar to 1965. Again the largest flock, 250-300, was in alders at Fishers Green, Essex, in January and February (PRJA). Another large gathering was *c.* 150 at Cassiobury Park, Herts., on Jan. 5th (JPH). Elsewhere numbers did not exceed 60. However during the period Mar. 18th to Apr. 28th, 158 were ringed in a small garden at Weybridge, attracted there by ample supplies of fat. Two of these, ringed on Apr. 2nd, were recovered in Belgium, one at Wortegem, East Flanders, on May 7th, 1966, the other at Schoten, Antwerp, on Oct. 16th, 1966 (GHG). The last recorded was one at Sundridge on May 7th (RVW). First arrivals in the autumn were five at South Marden on Sept. 25th (AJH). Numbers were smaller than at the beginning of the year, but increased in December, when there were 103 along the Thames from Chertsey to Weybridge (GHG).

395 Linnnet

The largest number reported was 400 at Romford S.F. on Jan. 8th (RRS). ACP reported a non-breeding population of *c.* 200 during the summer at Fairlop G.P.

396 Twite

E Romford S.F., one trapped and ringed on Jan. 23rd (RRS).

397 Redpoll

Breeding season distribution is given below. PJSn estimated there were 800-1,000 on Wimbledon Common on Jan. 30th. Birds considered to have the characters of the race *flammea* (Mealy Redpoll)

were seen by DIMW in Epping Forest, two on Jan. 1st, one on Mar. 19th, by MPT at Weald Park, one on Jan. 31st, and by JGH and JMH at Sevenoaks, two on Nov. 9th.

- E Brentwood, a pair in a garden, one carrying nesting material, on June 2nd (HM). Epping Forest, about ten pairs at Warren Wood on June 3rd (DIMW) and several in other parts of the Forest on May 14th (GCG).
- H Northaw Great Wood, six on May 15th (GCG). Rye Meads, on June 11th a pair with nest that was later destroyed by a predator (RMRG).
- M Bentley Priory, three pairs nested (EHW). Hampstead, two pairs bred (EHW). Ruislip, single birds at Park Wood and the Common June 11th (IGJ). Stanmore Common, one pair bred (GAMB, EHW).
- K Bromley, three pairs on June 29th (PJG). Hosey Common, 3-4 pairs; Sundridge, 3 pairs; Timberden Bottom, 2 pairs; Goodley Stock, 1-2 pairs; Brasted, 1 pair (RVW).
- S Ashted Common, one or two pairs on May 31st; a deserted nest found (WRI). Banstead Downs, two pairs in April and May (MJCD). Banstead Heath, *c.* four in song flight on July 13th (WRI). Banstead, Park Downs, two in song flight on July 31st (WRI). Banstead Wood, a nest found on July 31st (WRI). Bookham Common, 3-4 in song flight in June (GB, WRI). Chelsham, five pairs bred in Holt Wood (CDH). Epsom Common, at least two pairs bred (IRB). Esher Common, 6-8 pairs in the breeding season; a nest found on June 3rd (WRI). Headley Heath, 4-6 pairs; one nest found July 24th (WRI). Prince's Coverts, 6-8 pairs bred (WRI). Walton Heath, five in song flight on May 24th (ADP); *c.* four pairs on July 13th (WRI).

401 Bullfinch

Breeding season distribution in Inner London is given.

- M Inner London: Hyde Park and Kensington Gardens, one pair from March to June, but breeding not proved (DB, RFS). Regent's Park, three nesting pairs, but probably a fourth present; two pairs are known to have fledged four young (RCG).

404 Crossbill

Following arrivals on the east coast from the middle of June onwards, the first reported in the London Area was at Havering on June 26th. No more were seen until five, also at Havering, on July 3rd. On the 5th there were 12 in Greenwich Park, and nine at Wimbledon Common; arrivals in the next five days included 20 flying S. at Tooting Bec Common on the 7th, 35 at Havering on the 9th, and 50 at Esher on the 11th. By the middle of July birds had been seen at half the 48 localities which were eventually visited. The numbers probably fell in early August, and 60+ at Esher on August 15th may have been new arrivals. There were still 41 at St. George's Hill on Oct. 30th, but records fell sharply thereafter, and the last reported were 16 at St. George's Hill on Dec. 11th. The more important records for Surrey, and all records for the other counties are given.

- E Chigwell School grounds, *c.* 12 Oct. 15th to 30th, and six from Nov. 13th to early December (RECC, GHV). Havering, one on June 26th, five on July 3rd, 35 on the 9th, 31 on the 10th, 11 on the 16th, from one to four on five dates from July 17th to Aug. 29th, five on Oct. 15th (JEF). Parndon Woods, two flying over, calling, on July 9th, and five on the 14th (HPM).
- H Cuffley, seven on July 10th, one on July 23rd, two on Oct. 19th (JJ). Northaw Great Wood, two on Aug. 2nd (TJ). Rickmansworth, four on July 8th (WRPB).
- M Brent Res., one on Nov. 25th (LAB). Harrow Weald, one on Sept. 24th (EHW). Queen Mary Res., one on Sept. 23rd (MJR). Stanmore, a pair Aug. to early-Sept. (EHW).
Inner London: Kensington Gardens, three on July 7th (DB). Regent's Park, four on Sept. 2nd and two on the 10th (RCG).
- K Greenwich Park, 12 on July 5th, seven on the 14th, six on the 22nd, two on Aug. 15th and four on Sept. 7th (GPR). Farningham, one on Sept. 6th (RVW). Hosey Common, ten on July 24th, four on Aug. 13th and five on the 29th (ASH, RVW). Sevenoaks, eight on July 8th, 3-4 on July 9th, 10th and 17th, one Aug. 25th to 27th and Sept. 8th to 12th (JGH, JMH).
- S Banstead, Nork Wood, 15 on July 8th and thereafter up to 16 until Sept. 13th (RSB, RHB). Esher, small parties going to roost estimated at 50 on July 11th (RAD); 40-50, a large proportion juveniles, on July 14th (LGH); 60+ on Aug. 15th (IRB). Kenley, 10 on July 10th (AJH). Mickleham Downs, 15 on July 23rd (IRB). Ockham Common, at least 50 on July 31st (PJO). Oxshott Heath, at least ten on July 24th, 22 on July 23rd, 15 on Sept. 18th and 22nd and 20 on the 23rd (GB, IRB, PJO, SG); smaller numbers on other dates. Prince's Coverts, 25 on Sept. 24th, smaller numbers on four dates to Oct. 8th (IRB). Reigate Heath, 14 on July 23rd (DW). St. George's Hill, many small flocks seen Aug. to Oct. usually 8-14; largest number 41 on Oct. 30th; 14 on Nov. 6th and 16 on Dec. 11th (GHG). Tooting Bec Common, 20 flying S. on July 7th (RSB). Weybridge, 22 on July 11th (GHG). West Ewell, six flying W. calling on July 6th (IRB). Wimbledon Common, nine on July 5th, four July 7th to 12th (WRI).

407 Chaffinch

Breeding season records for Inner London are given.

- M Inner London: Holland Park, two singing males; collecting of nesting material seen, but no evidence of successful breeding (EPB). Hyde Park and Kensington Gardens, 19 territories; bred successfully (RFS). Regent's Park, eight breeding pairs; six broods seen (RCG).
- S Inner London: a male sang regularly in Archbishop's Park until mid-July but no hen appeared (GHG).

408 Brambling

Less common at the beginning of the year than in 1965; the largest flock was 70 at Romford S.F., on Jan. 17th, and none were seen after

Apr. 8th. First arrivals in the autumn were two at Greenwich Park on Sept. 23rd, an early date, but very few were reported subsequently, except for *c.* 300 in an orchard area at Epping Long Green on Oct. 20th (HPM); these birds were presumably migrants, as no other flock reported exceeded 15. In Inner London, two were seen in Regent's Park on Nov. 10th (RCG) and one in Kensington Gardens on Dec. 21st (DB).

409 Yellowhammer

A flock of 90 was seen at Brasted, Kent, on Apr. 3rd (rvw).

410 Corn Bunting

Breeding season distribution and Inner London records are given.

E Fairlop/Hainault, ten pairs (ACP). North Ockenden, MJA reported that the number of breeding pairs was reduced due to flooding. Sewardstonebury, one singing on June 21st (BSMs).

H Shenleybury, three singing males (ASK).

M Inner London: Regent's Park, one on Jan. 30th (RCG).

K No information has been received for Kent.

S Wimbledon Common, one singing in June and July was apparently unmated (WRI).

421 Reed Bunting

M Inner London: Regent's Park, four on Oct. 30th, one on Nov. 6th and 10th (RCG). Hanover Gardens, a male on a crab-apple tree on Dec. 31st (RBB).

423 Snow Bunting

M Staines Res., one on Nov. 13th and 15th (MJR, cw). Inner London: Hyde Park, one on Oct. 17th (JW).

424 House Sparrow

M Inner London: Kensington Gardens, counts gave the population at 642 in November and 680 in December, almost 200 less than the census in 1948 (RFS). Regent's Park, the population in January was estimated at 1,000+ (RCG).

425 Tree Sparrow

Additions to the breeding distribution given in the *L.B.R.* No. 27 for 1962 and subsequent reports, and Inner London records are given.

E Great Parndon, many pairs known to have nested (HPM).

M Inner London: Regent's Park, one on Oct. 30th and Nov. 10th and three on Nov. 20th (RCG).

S Godstone, several present all year, and nesting (AJH).

Additions and Corrections to The London Bird Report for 1964 and 1965

62 Velvet Scoter

M Queen Mary Res., one on Jan. 2nd, 1965 (DMP).

80 Brent Goose

M Staines Res., four on Mar. 18th, 1965 (DMP).

115 Red-legged Partridge

M *Correction*: 1965, delete records for Bushy Park and Staines Moor which refer to the Common Partridge (WRI).

193 Arctic Skua

M Queen Mary Res., a dark phase bird on May 18th, 1965 (MJR).

202/3 Glaucous/Iceland Gull

M Queen Mary Res., an immature on Mar. 26th, 1965 (MJR).

205 Mediterranean Gull

M Staines Res., an adult on Sept. 21st, 1965 (JBC, MJR). Satisfactory details have been received. The first record for the London Area.

255 Swift

M Hampstead, a very late bird on Nov. 12th, 1965 (JO). Satisfactory details have been received.

256 Alpine Swift

H St. Albans, one on Sept. 30th, 1965 (КTBH), was probably the bird seen four days earlier between West Hyde and Harefield and published in the *L.B.R.* for 1965.

261 Hoopoe

M Staines Res., one on Apr. 14th, 1965 (JBC).

321 Black Redstart

M Inner London, a pair bred in Gough Square, Fleet Street, in 1964 and 1965 (HSM).

340 Icterine Warbler

M Staines Res., one in small bushes by the causeway on Aug. 9th, 1965 (JBC). Satisfactory details have been received. The first certain identification of this species for the London Area.

423 Snow Bunting

M Staines Res., one on Nov. 5th and Dec. 21st, 1965 (MJR).

The Birds of Greenwich Park and Blackheath

By P. J. GRANT

Summary

1. From the end of September 1964 until November 1966, the bird life of Greenwich Park and adjacent Blackheath was studied during regular visits, mainly during the early morning, almost daily at main periods of migration.

2. During these 26 months, a total of 91 species was recorded—50 in 1964, 79 in 1965 and 84 during 1966.

3. A breeding census was carried out in both years in the Park, revealing a total of 29 species breeding or present during the breeding season in 1965, and 27 species in 1966.

4. Detailed notes and comments on the migration and breeding of all species in the Park are summarized in a systematic list, and general points are discussed in separate sections on the migrant and breeding populations.

5. An account of the bird-life in the Park during six years from 1896-1901 is summarized to show that the Park today holds a comparable number of breeding and visiting species.

Introduction

At the end of September 1964, I began a series of early-morning watches in Greenwich Park and on Blackheath. The purpose of these visits was to record the passage of visible migrants over the area during the late autumn. The presence of an interesting variety of "resident" species recorded incidentally during this period, and the varied selection of habitats available in the Park, suggested that a thorough survey might be of value, and until November 1966, a period of 26 months, visits were continued with regularity, almost daily at the main periods of migration. This paper summarizes the records obtained during that period.

Previous studies of this kind, particularly that of Regent's Park and Primrose Hill (Wallace, 1961), have undoubtedly provided a basis for the better understanding of the ornithology of the London area as a whole. As far as the migrant population is concerned the combined results obtained from these and future studies based on a similar daily count method in other sample areas, will eventually produce a comprehensive picture of migration, both diurnal and nocturnal, through the London area.

With this in mind in the present paper the author has, where necessary, discussed the results obtained in the light of previous information available for the London area, and in some cases observations are compared with those from coastal stations, whenever a similar migration pattern emerges.

Also in the present paper, much more space has been given to the systematic list than in previous papers, as it is felt that the aim of building-up

a comprehensive picture of migration through the London area, could be more conveniently handled from records dealt with on a specific basis.

In some cases theories have been put forward in the hope that they will provoke comment from future writers.

The Park

Greenwich Park, approximately 180 acres in extent, is situated, broadly speaking on the S.E. edge of the urban mass of London. To the north and west lie the closely built areas of Greenwich and Deptford, and the Docklands of the Thames, whereas to the south and east the Park is bordered by the open grass sports pitches of Blackheath and beyond this the suburban areas of Lewisham and Blackheath.

The Park is crossed by an irregular escarpment, running east to west, which slopes sharply down to the Thames valley to the north, the highest point reaches 155 feet above sea level near the old Royal Greenwich Observatory and the Wolfe Statue, on the northern boundary is its lowest point at about 32 feet.

A dominating view over the Thames Valley and London can thus be obtained from the crest of this escarpment, and a point near the Wolfe Statue was found to be ideal for the observation of diurnal movements. The low-lying northern section of the Park is largely covered by open grass and avenues of chestnut and elm. The concreted boating lake in this area is of little ornithological interest. The escarpment slope and the "plateau" of the southern section of the Park provide the main areas of importance.

The three bird sanctuaries situated in the Wilderness combine to make an invaluable area of undisturbed habitat. The thinning of tree cover in these sanctuaries in recent years and during the period of the survey, has promoted undergrowth with a rewarding increase in the variety and total number of the breeding population, which has included Willow Warbler, Blackcap and Lesser Whitethroat. In the sanctuaries chestnut, oak and elm are co-dominant. Before these were thinned out, undergrowth was sparse or virtually non-existent. After the tree-cover had been thinned, the consequent flourishing growth of bramble and bracken, and the planting of a variety of shrubbery including briar, cotoneaster, cupressus and box combined to produce the excellent breeding conditions which now exist.

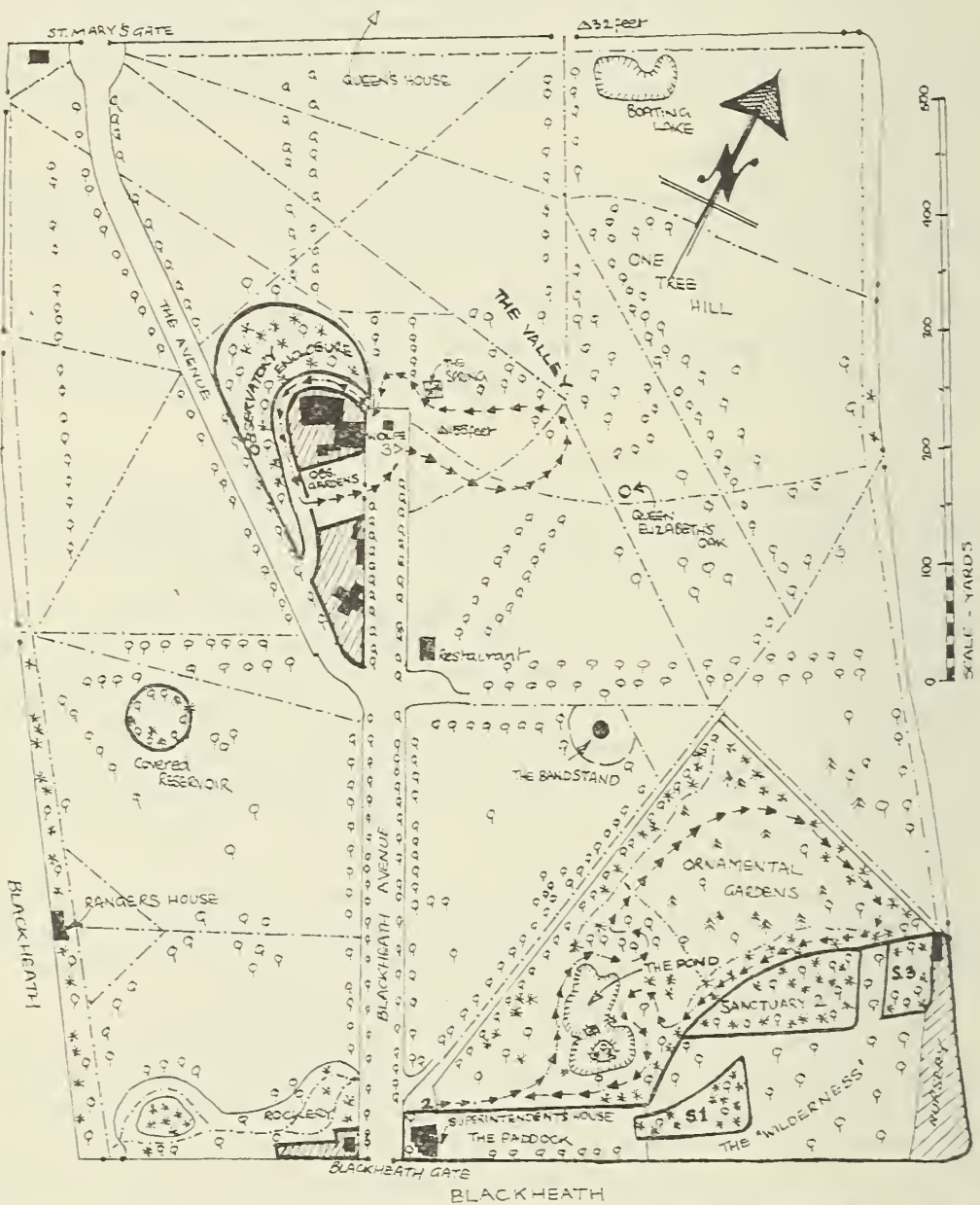
Similar work and the planting of shrubbery and trees in the Observatory enclosure was undertaken during the winter of 1966/67. Although this work is largely of an ornamental nature, it should likewise have a beneficial effect on the birds of that area in the future.

The lack of a large expanse of water in the Park is obvious from the paucity of records for breeding and visiting aquatic species and waterfowl. The Gardens Pond, approximately one acre in extent, houses an interesting collection of pinioned duck, probably the most varied in South London. Here too, much improvement has been made, mainly during the period of the survey. A small floating island has been provided, planted with a variety of cover. The edges of the Pond have been greatly improved

with a large amount of aquatic plants, willow and shrubbery, making the water much more secluded, and the increasing number of records of wild duck during the survey is undoubtedly a result. The Pond area is also of great attraction to migrants, *Phylloscopus* warblers in particular.

The importance to the migrant population of a small spring surrounded by willow, hawthorn, birch and oak, about a hundred yards down the slope to the N.E. of the Wolfe statue, and of the valley between the Observatory and One Tree Hill is discussed in the section dealing with the migrant population.

A map is provided to indicate the localities mentioned in this paper, and also to show the main habitats of the Park.



MAIN FOOTPATHS	MIGRANT CENSUS ROUTES	TREES OR AVENUES	CONIFERS	UNDERGROWTH SHRUBBERY	MAIN BUILDINGS
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The Daily Count

The routes of the daily census as indicated on the map were used, with a few minor alterations, throughout the period. To give a cross-section of the habitats available in the Park, three areas were covered, and these are described in detail below. It was possible to cover these areas in one hour, although on some mornings when an obvious arrival had occurred as long as three hours were spent in the Park.

Area 1: Blackheath: The main purpose for the inclusion of this area in the daily census was to count the gulls which gathered in the mornings. Counts of other species in this area have been ignored as far as this paper is concerned, except in a few cases where certain records are of particular interest.

This large area, apart from three small ponds and a small group of trees, is mainly given over to sports pitches. The flatness of the area facilitated the counting of gull flocks, which could be accomplished from the car from three or four strategic points.

Area 2: The Pond and Ornamental Gardens: In this and in the third area all birds visible from the census routes were included in the daily count.

This area is entirely ornamental, laid out with lawns, flower beds and paths, but the great variety of trees, the attraction to migrants of the Pond area, and efforts to obtain a "natural" overall appearance in the landscaping, provide an area of particular interest to the bird-watcher. The section of the walk which embraces the adjacent sanctuaries in the Wilderness was of particular importance.

Area 3: The Wolfe statue and Observatory area: The obvious advantages of this area as a vantage point for the observation of visible movements should not overshadow its importance as an area attractive to migrants. The double line of hawthorns running down the hill below the Wolfe statue, the tree-covered spring, and the wooded valley between the Observatory and One Tree Hill, often held the majority of migrants in the Park, as discussed in the section on the migrant population.

As well as the early-morning counts, short visits were often made during the day and in the evening. However these additional watches usually covered other areas, for example the Wilderness, One Tree Hill or the Reservoir/Ranger's House area, thus data comparing morning and evening populations in the same locality were insufficient for analysis.

Early morning visits of more than one hour's duration were made on the following number of days in each month of the survey:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1964:	—	—	—	—	—	—	—	—	2	23	8	0
1965:	4	4	17	25	26	9	26	25	26	10	5	5
1966:	6	4	20	19	19	6	12	22	22	7	12	0

In addition some of the Park staff kept records of their observations throughout the year.

The Breeding Census

The methods used in the breeding census differ little from those employed by Wallace (1961) in Regent's Park and Primrose Hill. For convenience, at the beginning of the census, the Park was divided into seven areas. From May to July one or more of these areas was covered on each visit. By the end of this period in both years all seven areas had been visited at least twice, and those which contained areas of particular importance like the Wilderness, One Tree Hill, and the Ranger's House area, and the areas covered by the sample census routes, were checked over and over again. The totals for the breeding population in this paper thus refer to the whole area within the Park walls.

The Migrant Population

As explained in the introduction, it was thought preferable to discuss migrant movements through the Park in detail under species in the systematic list.

In this section attention is drawn to general aspects of migration as observed in the Park.

Visible migration: As a result of the predominance of clear skies with E winds during October 1965, numbers of the commoner visible migrants were well down on the previous year.

On several days when visible migration was in progress, it was obvious that the general picture was being confused by migrants dropping into the Park, presumably to rest, and by others "milling" over the Park as if looking for a suitable place to ground. On such days there was no obvious advantage in watching visible movements from an open area where such distractions to birds flying over are bound to occur. A much more steady movement, probably indicating the true direction of flight, was always apparent in watches from my garden in New Cross, a closely built urban area. There is a possibility that diurnal movements of small numbers were missed in the Park, whereas the same birds flying over an urban area would be obvious migrants.

Nocturnal migration: As a bird-watcher who had previously witnessed the arrivals of nocturnal migrants only at coastal and island bird observatories, I was increasingly aware as the survey progressed of the lack of any really large falls or rushes of migrants in the Park. Nevertheless the fact that such a variety of migrants, although only small in number, could be seen only a stone's throw from my home in an area which I had previously considered an ornithological void, made watching in the Park no less exciting.

The small number of nocturnal migrants which can be seen in such an inland locality is undoubtedly largely due to the lack of any agent to concentrate them into a restricted area. A coastal observatory can, for example, reap the harvest of a thin scattering of migrants meeting adverse weather over a large area of sea. Similarly, a fall can be produced on the coast by migrants moving over land in conditions bad enough to halt their migration at the coast.

In the London area it is conceivable that the urban "sea" may act in the same way to concentrate migrants into Park "islands", but with no information available as to the density of migrant populations in other inland localities outside the London area, it is difficult to establish whether this type of concentration occurs. Conversely, for the same reason it is not possible to know whether nocturnal migrants will ground in the London area to a lesser extent than in "normal" open country. However, it is suggested that a better picture of the true *weight* of migration into or out of Britain can be obtained from inland areas like the London Parks, than at coastal stations where migrant arrivals are affected by drift and freak concentrations caused by special weather conditions.

Certainly the migrant arrival in Greenwich Park was far less dependent on overnight weather than at a coastal station. Although light winds appeared to be essential for any "large" arrival, it was not necessary for these to be accompanied by overcast or rain, many of the sizeable falls occurring after clear skies overnight. During rough weather, with strong winds and/or heavy rain, however, migrant arrivals were effectively halted, or at the most involved very small numbers. During such periods of adverse weather the same migrant population often remained in the Park for several days.

An interesting feature of certain days in the autumn, and to a lesser extent in the spring, was a movement of Warblers in a SE direction up the valley between the Observatory and One Tree Hill. Only small numbers were involved, never more than ten in one morning's watch, and usually in fine weather with light winds. The commonest species involved were Willow Warblers and Chiffchaffs, but Lesser Whitethroats, Whitethroats and Blackcaps were also recorded on some days. In 1966 Song Thrushes frequently used this route as described in the systematic list. The birds involved moved from bush to bush, feeding intermittently. The wide mouth of the valley opens out facing NW over London, and the impression gained was that these birds had recently (after dawn) flown over that area, perhaps heading for the green escarpment of the Park which must have been visible for many miles around, to be "funnelled in" up the valley. In all 56 Warblers were recorded actually using this route during the survey, 43 of these during the autumn, when SE was presumably the intended general direction of their migration. It is felt that this is direct evidence that a "bush to bush" type migration does occur diurnally to supplement normal nocturnal migration.

The small spring surrounded by a group of willow, hawthorn, birch and oak, situated 100 yards NE of the Wolfe statue, provides the only permanent water in the area for some distance, and this and its situation on the slope of the "migrant funnel" probably accounts for its exceptional attraction to migrant Warblers and Chats. During dry weather in the autumn, this tiny area and the two lines of hawthorns running down the slope below the Wolfe statue nearby, accounted for the great majority of nocturnal migrants recorded in the census areas.

The cold weather at the beginning of 1966, although not particularly severe, provided some interesting movements. It is in no way suggested

that these movements were at all exceptional in the variety of species or numbers involved.

The Breeding Population

The detailed breeding notes are summarized in the systematic list. The number of pairs breeding or probably breeding in each year are given in the list below. Where a pair was present in the breeding season, but where no direct evidence of attempted breeding was obtained, the figure is included in parenthesis.

	1965	1966		1965	1966
Mallard	c.25	c.25	Mistle Thrush	5	6
Mute Swan	—	1	Song Thrush	18	18
Moorhen	5	5	Blackbird	54	49
Stock Dove	4	3	Robin	16	18
Wood Pigeon	c.50	c.50	Blackcap	1	1(1)
Tawny Owl	(1)	(1)	Lesser Whitethroat	1	—
Great Spotted Woodpecker	1	(1)	Willow Warbler	1	—
Carrion Crow	4	2	Spotted Flycatcher	5	6
Jackdaw	9	6	Dunnock	18	25
Jay	6	(1)	Starling	c.100	c.100
Great Tit	8	7	Goldfinch	—	(1)
Blue Tit	12	12	Greenfinch	4	8
Coal Tit	3	4	Bullfinch	2	2
Treecreeper	1	—	Chaffinch	1	(4)
Wren	2	4	House Sparrow	c.150	c.150
Total pairs breeding or probably breeding in 180 acres,					
			Greenwich Park	c.507	c.511

Thus the density figure was approximately 56 birds per ten acres in 1965 and 57 birds per ten acres in 1966. In 1959 Wallace found a breeding density of 19/22 birds per ten acres in Regent's Park, a figure similar to the national average for permanent grassland, which is 20 birds per ten acres (Simms, 1962). He explains that this comparatively low figure is due to the presence of many well trodden open grass swards in Regent's Park. In Greenwich Park similar large areas of grass exist, but their limiting effect on the overall density of the breeding population is offset by the avenues of old chestnuts and elm which abound, and which provide an apparently limitless supply of nesting holes for House Sparrows and Starlings in particular. The startling difference in the breeding density is thus largely due to the higher population of these two species. The old ivy-covered Queen Elizabeth's Oak, situated in the valley between the Observatory and One Tree Hill, holds a breeding colony of about 40 pairs of House Sparrows alone!

The large open area of adjacent Blackheath provides excellent feeding for both of these species, and also for the Wood Pigeon, and the lack of

nesting sites there may also act to concentrate on above average population in the Park.

Even so, the breeding population density in the Park is still only slightly above the national average for mixed woodland and built up areas (both 50 birds per ten acres), and far below the average figure for *natural* parkland, which is 100 birds per ten acres (Simms, 1962).

Wallace also notes that of genera breeding in the Regent's Park, 78% were represented by a single species, while the number of species per genus averaged 1.26. He compares these figures with the work of Elton (1946), who found that in a survey covering a wide range of habitats the average figures were 86% and 1.38, and uses this as an indication of the remarkable breadth of the breeding population in Regent's Park in 1959. In Greenwich Park in 1965 the comparable figures were 65% and 1.64, and in 1966 70% and 1.58. If the figures for the two years are combined the resultant quotients are 65% and 1.76. Thus although the Park has a breeding population density more than twice that of Regent's Park, a proportionate number of new genera are not attracted, it would seem as a result of the limited diversity of habitats available.

Wallace (1961) draws attention to the withdrawal from time to time of certain breeding species in Regent's Park, and suggests that uncertain success may be the cause. In Greenwich Park the successful breeding of a pair of Willow Warblers and Lesser Whitethroats in 1965, (neither of which bred or attempted to breed in 1966), coincided with a year of abundance of both species as a migrant in the Park, compared with 1966, as shown in the table below.

	<i>Migrant bird/days in Greenwich Park</i>	
	1965	1966
Willow Warbler	301	87
Lesser Whitethroat	24	3

Also the *London Bird Report* (No. 30) states that Lesser Whitethroats were "commoner than usual" in 1965 in the London area. Thus, as far as warblers are concerned, their withdrawal from time to time as breeding species in London area localities may be closely connected with their abundance as migrants through these localities from year to year, although changing ecological conditions cannot be ignored. The Blackcap, which bred or attempted to breed in both years, provided few records of definite migrants. This would indicate that, if the above correlation does in fact exist, this is the only one of the three Warbler species mentioned for which the habitats in the Park appear to have a strong attraction as a breeding locality.

Systematic List

CORMORANT: Two flew high W on April 2nd, 1966.

HERON: Autumn passage in both years during August, with two on the 14th and three more on the 16th in 1965, and one on the 19th in 1966. All of these birds were flying high W. or N.W.

MALLARD: Daily feeding intended for the pinioned waterfowl collection on the Pond is undoubtedly of great attraction to this species. Large numbers are present in all months. The peak count for each month of the survey outside the breeding season is given below:

	Jan.	Feb.	Mar.	Aug.	Sept.	Oct.	Nov.	Dec.
1964:						160	105	?
1965:	?	?	70	77	99	90	120	?
1966:	140	150	50	?	140	105	100	

Breeding: About 25 pairs bred in both years, the majority of sites being around the Pond and in the nearby sanctuaries. In 1965, 15 broods appeared on the Pond between April 29th and July 23rd, totalling 80 ducklings, of which about 30 reached full size. Although the hatch was greater in 1966, with 16 broods totalling 100 ducklings between April 22nd and July 22nd, only 25 fully grown young survived.

TEAL: A party of nine arrived on the Pond on the evening of July 13th, 1965, and left early the next morning. All were in fresh female type plumage, and were undoubtedly birds of the year.

WIGEON: On March 20th, 1965, a party of 18 arrived on the Pond in the evening and had disappeared by the next morning. In 1966 a free-winged female, noticeably wilder in behaviour than its pinioned associates, was present from February 24th until the end of May.

PINTAIL: From November 17th, 1966 until the end of the year, two birds, an adult male and an immature male, visited the pond regularly.

SHOVELER: A female on most dates between August 25th and September 5th, 1966.

TUFTED DUCK: The total of full-winged individuals was three during 1965 and four during 1966.

COMMON SCOTER: An oiled female arrived on the Pond on February 21st, 1966, but died soon afterwards.

CANADA GOOSE: One on the Pond on April 8th, 1966.

MUTE SWAN: This species, recorded on only three occasions from 1955 to 1964, was seen on seven dates in 1965, a total of 20 individuals, all flying over the Park. In 1966 it was seen on nine dates, a total of 33 individuals, not including the pair which attempted to breed (see below). This apparent increase in the area in recent years is confirmed by the unprecedented regularity of this species on the small ponds on nearby Blackheath outside the breeding season during the same period. Three of the Blackheath birds had been ringed at Wanstead, Rye Meads and Chelsea, outside the breeding season.

Breeding: The increase of this species in the area noted above was reflected by the attempted breeding of a pair on the Pond in 1966, apparently for the first time. The pair took up residence at the

beginning of April and began nest-building soon afterwards, but their aggressive behaviour towards the pinioned waterfowl necessitated their removal to the Thames on April 27th, after the removal of several partially built nests had failed to discourage them from staying on the Pond.

SPARROWHAWK: One in the Wilderness on July 4th, 1965, in the evening.

MERLIN: On January 29th, 1966, one flew N. over the Wolfe statue, during a small return movement of Fieldfares, Skylarks and Linnets after cold weather.

KESTREL: Total bird/days during each month of the survey were:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1964:										3	3	0
1965:	0	0	1	1	0	0	2	6	4	1	0	0
1966:	1	2	0	2	2	1	1	1	5	6	4	

The increase in records from August to November would indicate the presence of migrants, although all records referred to birds hunting over the Park, thus giving no direct evidence of migration. The occurrence of adults during the summer in 1966, strongly suggested breeding in the area.

MOORHEN: A steady population of 10-12 birds on the Pond throughout the period.

Breeding: The five or six breeding pairs thus involved in both years raised very few fully grown young, suggesting that the population was at its capacity for such a small area of water.

COOT: Only one record of this species which normally prefers a large area of water, a single bird on the pond from July 6th until September 12th, 1965.

LAPWING: Apart from small S.W. movements associated with cold weather from January 21st until February 18th, 1966, totalling 94 birds, the direction of diurnal migrants at other times of the year was always W. or N.W., and the total bird/days for each month are given below.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1964:										134	?	0
1965:	0	0	0	0	1	0	50	0	48	0	40	0
1966: (see above)	36	0	0	43	247	0	11	3	2			

Of particular interest are the June and July movements and the large numbers recorded during this period in 1966. Wallace recorded a similar but smaller movement over Regent's Park in 1959, and it seems likely that this movement occurs annually over the London area. Nearly all of the birds flying over the Park during this period were birds of the year, from the white carpal mark on the upper wing, but occasional adult birds in worn plumage were also noted. At Dungeness a midsummer immigration from the Continent is recorded annually.

SNIBE: One flushed from the Wilderness on March 26th, 1965.

WOODCOCK: One flushed from the Wilderness on March 22nd, 1965.

CURLEW: One flew high W. on October 30th, 1964. Another was feeding with gulls on Blackheath at 07.30 hours on February 12th, 1966. The presence of the latter bird was undoubtedly brought about by the weather conditions at the time; drizzle with poor visibility, and the very cold weather in the North and on the Continent.

GREEN SANDPIPER: One landed briefly by the Pond on October 2nd, 1964.

COMMON SANDPIPER: Singles on May 7th and August 18th, 1965, and May 9th, 1966.

GREATER BLACK-BACKED GULL: An infrequent visitor to the area recorded on only six dates during the survey.

In October 1964 there were six with the gull flocks on Blackheath on the 12th, three on the 13th and five on the 14th. In 1965 three flew over on September 1st, and there was one on Blackheath on October 17th. The only record in 1966 was of one on Blackheath on January 4th.

HERRING GULL: In 1964 recorded in October only, when there were singles on Blackheath on the 4th and 13th, and seven there on the 14th.

In 1965, one on Blackheath and two flying over on February 21st, one in the Park on October 17th, 16 on Blackheath on December 23rd, and one on the 24th.

Cold weather during January 1966 produced the highest number of the survey, when 40 flew E. in formation flocks on the 18th. The only other records in this year were of singles on Blackheath on October 25th and November 8th.

GULLS: The occurrence of the other three gull species recorded (Lesser Black-backed, Common and Black-headed) in and flying over the Park is regulated by the numbers involved in the morning gatherings on Blackheath. All three species have been seen feeding in the Park, on the larger areas of open grass, usually when the population on Blackheath is particularly high. During the morning the gulls leave Blackheath and fly over the Park on their way to the River. Only in the winter months (except at weekends) does any large proportion stay on Blackheath during the day, perhaps due to less human disturbance at that time of the year.

STOCK DOVE: In both years occurred regularly from mid-February until mid-September, and there was no evidence to suggest that the birds concerned were other than the resident population. From October to January there were only three records, one on October 28th, 1965, three during cold weather on January 19th, 1966, and two later the same month on the 29th.

During the period of the survey this species was never seen feeding

in the Park, although occasionally drinking from puddles was noted. It is possible that they may leave the Park for food, although there was no direct evidence of this.

Breeding: Four pairs were present during 1965 and three pairs during 1966. Only one definite juvenile was seen, on July 14th, 1966. In both years two pairs used nesting sites in the old Elms to the W. of One Tree Hill, and one pair in the Gardens/Wilderness area. The additional pair in 1965 frequented the Reservoir area.

WOOD PIGEON: As a visible migrant this species was noted in November 1964 only, when 350 dropped into the Park and 56 flew W. on the 3rd, 250 S.W. on the 4th, 228 S.E. on the 6th, 68 W. on the 12th, and 12 flew W. on the 13th. During cold weather 120 flew E. on January 19th, 1966, some of these dropping in to rest in the Park. The presence of feeding flocks on Blackheath and in the Park was erratic, and it was possible to find large numbers in most months, even during the summer.

Breeding: Breeds commonly in the Park, but the large summer population of apparently non-breeding birds made an accurate count impossible.

TURTLE DOVE: In 1965 a clear-cut passage period during the spring from the 1st to the 17th May, when 24 individuals were noted with a peak of seven on the 11th. Of the 16 of these which were flying over, 12 were moving between N.E. and S.W., one W., two N. and one S.W. In 1966 this marked passage was not repeated, with singles on the 11th and 17th May only. The only autumn record during the survey was of one flying W. on September 6th, 1966.

COLLARED DOVE: Two beneath the conifers in the Ornamental Gardens on March 29th, 1965, were watched for a short period before they flew off high to the N.W.

CUCKOO: Spring records only in both years, a total of three during April, four during May and three during June. Earliest date was April 22nd, 1965, and the latest date June 14th, 1965.

TAWNY OWL: Recorded regularly from March to October in both years, and probably resident throughout the year. Birds were picked up in weak condition and later died on September 4th and October 9th, 1966.

Breeding: A pair present in or near Sanctuary 1 in both years gave no certain evidence of breeding. An additional bird was heard calling on several occasions in the One Tree Hill area in 1965.

SWIFT: During May 1965 there was a marked passage of birds flying strongly W. from 5th to the 25th, a total of 168 individuals with a peak of 75 on the 8th. In 1966 this passage was not repeated at the same strength; an isolated record of five on April 27th, and only 20 bird/days during May. Once again all individuals involved were flying strongly W., following the line of the escarpment.

In both years this spring passage was quite isolated from the appearance of birds feeding over the Park during June and July, the latter month producing the peak day count of 66 and 53 respectively for each year.

From the beginning of August in both years, numbers decreased without any obvious directional movements, and in 1965 all had left by the 5th, except for three stragglers on the 19th, and in 1966 the last record was of one on the 11th.

GREAT SPOTTED WOODPECKER: Recorded in all months during the period of the survey, up to three, but scarce November/January. The presence of birds during the breeding season, which may remain in the area all the year, probably masked the passage of a small number of migrants. However, three birds were present on August 15th, 1966, including a red-capped juvenile, when this species had not been seen previously that month, and it was strongly suspected that these were migrants. Also, in August 1965, juveniles were noted on the 11th and 12th, when this species was not thought to have bred successfully in the Park.

Breeding: One pair present in both years during the breeding season. In 1965 a completed nest hole in the Ornamental Gardens was soon taken over by House Sparrows.

WOODLARK: One flew low over Blackheath on October 19th, 1964.

SKYLARK: The usual autumn passage was noted in all three years, but only in 1966 was this species recorded outside this period, when up to four birds were seen regularly feeding on Blackheath from January 14th until March 17th. These occurrences may have been the result of cold weather at the beginning of the period. In addition during this period 12 flew S.E. on January 25th, and six W. and one S. on the 29th, after cold weather. The only record of spring passage was of two flying N.W. on March 28th.

Apart from the exceptional passage on October 19th, 1964, when 288 flew W. in one hour, visible migrants never exceeded a total of ten on any one day. In 1964 passage was between October 2nd and November 3rd, involving a total (excluding the movement noted above) of 34 birds flying W. or N.W. On November 6th three flew S.E. In 1965 an early bird was seen flying S. on July 23rd, two flying in the same direction on September 27th, and between October 17th and 27th a total of 20 N.W. with a peak of 10 on the 19th. Passage in 1966 involved 18 between N.W. and S.W. from September 23rd to November 10th.

SWALLOW: In 1965 spring passage was recorded between May 1st and 19th, a total of 20 birds, and in 1966 between April 19th and May 22nd, a total of 24. In both years the peak count was on May 1st, with four in 1965 and ten in 1966 and the direction of movement was between N. and W.

A straggler on July 1st, 1966 was the only record for that month, and the only records for August occurred in 1965, a total of 12 bird/days between the 1st and 18th. The main period of autumn passage in both years was during September, when a total of 48 was recorded between the 5th and 14th in 1965, with a peak of ten on the 10th; and a total of 50 between 3rd and 14th in 1966, with a peak of 28 on the 9th. After these dates there were occasional records of singles up to October 6th (1966). The direction of movement in the autumn was erratic, and more often than not into wind from whichever direction, although the larger movements were usually between S. and S.W. Apart from the 1965 August movement which was not repeated in 1966 it can be seen from the above that the main seasonal movements were remarkably similar in the two years, particularly in the timing of the peak counts.

HOUSE MARTIN: The spring passage of this species was remarkably inconspicuous, with a total of only five May records during the survey. From the beginning of June however, the population which breeds around Blackheath is much in evidence, up to 20 being present over the ponds there during the summer. The presence of these resident birds masks the commencement of the Autumn passage, but this was suspected as early as July 26th in 1966. Peak passage occurs during September, the peak count being 31 which flew S. on September 24th, 1966.

SAND MARTIN: In August, 1965 two on the 2nd, and one on the 4th, all flying W.

The only Spring record was of one flying N. very low and at high speed at dawn over Blackheath on the 1st April, 1966.

CARRION CROW: Present on Blackheath and in the Park in all months, with largest numbers from November to the beginning of March in both years. The highest count (excluding visible migrants) was a total of 40 on Blackheath and in the Park on February 15th, 1966, thus there is little doubt that 63 which flew W. on October 30th, 1964, were genuine migrants on a day when Jackdaws, Magpies and a Rook also flew over. This record was particularly interesting as this species does not appear to have been recorded as a definite visible migrant over the London area previously (L.N.H.S., 1964), although five passed N.W. over Regent's Park on October 13th, 1959 (Wallace, 1961). No visible migrants were recorded during 1965, but in October 1966 nine flew N.W. on the 21st, and in November nine flew N.W. on the 3rd, and eight S.E. on the 8th, suggesting that this type of movement may be more frequent than previous records would indicate.

Breeding: In 1965 four pairs completed nests in the Park and in 1966, two pairs. However, due to predation of ducklings experienced in previous years control was necessary, and none bred successfully.

ROOK: Recorded in the Park as a visible migrant only. In 1964 16 flew W. on October 20th, one flew W. on the 30th, and in November, five flew E. on the 6th. As with Carrion Crow there were no records of migrants during autumn 1965, although in March three flew low W. on the 16th. The only record during 1966 was made on November 11th, when of 17 Corvids flying W., two were identified as Jackdaws, and five of the remaining 15 larger birds as Rooks.

JACKDAW: The breeding population appears to be resident throughout the year, and there is some evidence that their numbers are swollen by new arrivals during the winter, for example 25-30 were present on Blackheath and in the Park on January 14th, 1966.

Visible passage was noted once in 1964 when ten flew W. on October 30th, with other Corvidae, and in 1966 on the following dates in November: 3rd (27 N.W.); 7th (21 N.W.); 8th (10 S.E.); 11th (2 W).

Breeding: An old chestnut tree in the Superintendent's garden had to be felled early in 1966 as it had become unsafe. This site had been used by two pairs in 1965, and its loss largely accounted for the drop from nine breeding pairs in 1965, to six pairs in 1966. The main breeding stronghold is in the Gardens/Wilderness area, but two pairs used the old chestnuts around the site of the Roman Villa in both years, and in 1965 a pair was seen carrying nest material to an unlocated site in the N.W. corner of the Park. A small number of juveniles was raised in both years.

MAGPIE: Apart from one bird which frequented the Wilderness area during October 1958 (which due to its boldness was presumed to have escaped from captivity), there have been no records of this species in the Park in recent years, thus the series of records obtained during the survey are of particular interest, and probably reflect the continued increase of this species in the London area since the 1930's (L.N.H.S., 1964).

In 1964 no less than 12 individuals were recorded between September 30th and November 3rd, with a peak of five on October 30th, three of which were flying W. with other Corvidae.

In autumn 1965 singles were present on September 8th and 13th and October 8th.

In 1966 one put in an unusually early appearance on July 23rd and from this date one or two birds were probably present until the end of the year, but only about five individuals were thought to be involved.

JAY: On March 2nd, 1966 there was an isolated record of a flock of six moving from tree to tree in a S.W. direction, and these were undoubtedly migrants.

Breeding: Although six or seven pairs were present in the 1965 breeding season, only one nest was located, and no young were seen. It may have been this failure which brought about a startling decrease in

1966, when apart from the migrants mentioned above, the maximum day count during the year was three, and only one pair was present during the breeding season.

GREAT TIT: In 1966 the maximum day count for each month of the year varied between five and nine. These comparatively steady numbers gave no indication of passage in that year, but in 1964 and 1965, although the maximum counts for the basic population were similar, on certain days during October 1964 and March 1965 numbers were markedly increased, in the census area, giving certain evidence of the passage of migrants. Thus on October 2nd, 1964, 15 were present, on the 15th, 14, and on the 30th, 22. In March 1965 there was a marked passage during the third week, when the average daily count was 16, with a peak of 20 on the 19th, on which day four were moving S.E. from tree to tree with Blue Tits and Chaffinches. This apparent return spring passage after an autumn movement in the previous year is a regular feature of Great Tit movements at Dungeness (D.B.O., 1964).

In addition to these movements, marked fluctuations of smaller numbers from day to day were noted from July to September in particular, which was thought to be the result of local movements.

Breeding: Eight pairs bred during 1965 and seven pairs in 1966.

BLUE TIT: Throughout the survey period numbers of the basic population were on average about three times higher than Great Tit in the daily census areas. In 1964 there were marked increases on six dates between September 29th and October 30th, with a maximum count of 40 on September 29th. As with Great Tit there was a well defined passage during the third week of March, 1965, but migratory activity continued on a smaller scale until April 6th, on which date two flew over high N.E. In 1966 there were marked migratory increases at the end of September, with a peak of 26 on the 29th, on which date three flew high W.

Breeding: Twelve pairs bred in both years.

COAL TIT: Resident birds present in all months, the highest counts occurring during June and July when their numbers were swollen by the presence of juveniles. The census area count on July 5th, 1966, for example, was 11, which equalled the number of Blue Tits present on that day. The presence of resident birds would mask the passage of small numbers of migrants, but arrivals were suspected on March 31st, 1966, when six were present (other than these the maximum count during March and April was three), and at the end of September in the same year during which period this species was also seen in built-up areas in Greenwich and Lewisham, where they are not normally recorded.

Breeding: In 1965 at least three fully grown juveniles were reared by one of the three breeding pairs in the Park, and in 1966 four pairs

bred, two of these in the Ornamental Gardens area raising five and six fully grown young respectively. The other sites frequented by a pair during the breeding season (success unknown) were the Reservoir and One Tree Hill/Restaurant areas.

NUTHATCH: This species, which used to breed in the Park, but which had not been recorded even as a visitor between 1960 and 1964, was noted twice during the survey, one near the reservoir on April 5th, 1965, and two during cold weather on January 18th, 1966.

TREECREEPER: Outside the breeding season in both years this species was infrequent but regular in both spring and autumn. There was a total of three April individuals, and from August to December a total of nine.

Breeding: One seen on four occasions during May 1965, in the One Tree Hill area, was collecting food on the 15th, and breeding was strongly suspected although the nest site was not found, nor were two birds ever seen together.

WREN: Present in all months of the survey with highest numbers occurring after the breeding season due to locally bred juveniles, and during October when the passage of migrants was suspected especially during 1964 and 1965. The peak count during these periods was never more than ten, in the census area.

Breeding: The increase from two breeding pairs in 1965 to four in 1966 is perhaps a reflection of the recovery of this species after the severe winter of 1962/63. The favoured breeding sites are in the sanctuaries in the Wilderness, although in 1966 one of the additional pairs bred in the Observatory Garden. In 1965 eight juveniles were present in the Wilderness while one of the pairs was feeding second brood young, and in 1966 several juveniles were noted, indicating another successful breeding season in that year.

MISTLE THRUSH: Maximum counts of residents for each month of the survey varied without any seasonal regularity between two and 13, although the higher counts were usually during July and August when there was a marked influx of juveniles probably bred outside the Park.

Rather scarce as a visible migrant, with a maximum of six N.W. during the large passage of October 19th, 1964. In January 1966, during cold weather, one flew W. on the 18th, and on the 25th one flew S.E. with other migrants involved in the return movement after milder weather.

Breeding: Five pairs in 1965 and six during 1966 were present in the breeding season.

FIELDFARE: Earliest and latest dates were October 1st (1965) and April 29th (1965). The usual visible migrants were noted each year during October and November, with highest numbers during 1966 when 164 flew W. on October 25th in $\frac{3}{4}$ hour, the only record for that month,

and a total of 203 birds between N.W. and N.E. on five dates between November 3rd and the 11th.

Passage birds and visible migrants were also noted in the spring in both years, mainly in March. In 1965, 13 flew W. on the 16th, four W. on the 18th and 11 circled high over the Park on the 23rd. In 1966, 25 flew S.W. on the 3rd and 27 W. on the 31st, and on April 2nd, 11 flew N.

Cold weather movement occurred in 1965 when 40 flew W. on December 27th after heavy frost, and during January 1966, with 34 between E. and S.E. in $\frac{1}{4}$ hour on the 19th, and 8 W. in $\frac{1}{4}$ hour on the 29th (return movement).

SONG THRUSH: Apart from an absence during cold weather for the first three weeks of January this species was present throughout the period of the survey. The maximum count of residents in the census area for each month of the survey varied with no seasonal regularity between eight and 22.

In 1964 the only visible migrants recorded were 20 W. on October 19th, but exceptionally high numbers on October 2nd, 6th, 8th and 14th suggested nocturnal arrivals.

In 1965 nocturnal arrivals were suspected between March 17th and April 5th, and on September 12th, and of 12 visible migrants noted between September 5th and October 27th, 11 were moving S.E.

In 1966 there was an interesting series of records of migrants. In August the maximum count in the census area was nine until the 26th, on which day there were ten "residents", but in addition at least 20 birds were watched arriving from the N.W. and moving from tree to tree up the valley between the Observatory and One Tree Hill, in a S.E. direction, with six Blackbirds. After this date numbers were above average on several dates but there was no further direct evidence of migration until September 28th, when two flew high S.E. and 16 were present in the census area. On September 30th there was another "up-valley" movement of five birds, and 17 others in the area. "Migratory restlessness" occurred on several dates up to November 8th. Of particular interest is the S.E. movement noted in both 1965 and 1966, and it is suggested that the birds involved were probably emigrant British breeders, a migrant population quite distinct from the Continental immigrants moving in a mainly W. direction later in the year. In support of this the only four distant recoveries of Song Thrushes mentioned in *The Birds of the London Area* (L.N.H.S., 1964), were in France, three of these birds in their first winter.

Breeding: In both years 18-20 pairs bred, but in 1966 no juveniles were seen out of the nest, and there was no obvious reason for this failure.

REDWING: The usual N.W. or W. immigration occurred during each autumn, the earliest recorded date being October 4th, 1964, usually continuing on into December. The peak movements were 260 in one

hour on October 19th, 1964, and 72 in $\frac{1}{2}$ hour on November 8th, 1966. Spring records refer to birds feeding in the Park only. In 1965 a flock of 12 first noted on the Rugby pitch on March 21st, had gradually decreased to one on the 26th. Some of these birds were in full song before they left. In 1966 spring records were confined to four dates between March 3rd and April 1st, a total of six birds.

Cold weather movements occurred during January 1966, when 12 flew W. on the 15th, one was present on the 18th, and in a $\frac{1}{4}$ hour on the 19th, 34 flew W.

RING OUZEL: Recorded in Spring 1966 only, during which period exceptionally large arrivals occurred on the South Coast. Two were present in the Ornamental Gardens on April 5th, and a male stayed overnight on the 20th/21st April. A fourth bird, a male, was seen feeding with Blackbirds on the open ground below the Wolfe statue on May 10th.

BLACKBIRD: Recorded as an autumn visible migrant in a W. direction only at times of the heaviest movements of other Thrushes, and then only in small numbers, for example eight W. on October 19th, 1964 and ten moving off high in a W. direction on the next day. However, several spectacular overnight arrivals indicated that large nocturnal movements do occur over the London area, from as early as September 22nd (1965) and September 27th (1966), until the first week in November. The largest arrivals of this type were during October 1964, when the basic population in the census area was 25-30 birds, but on 12 days the count was over 40 with peaks of 83 on the 13th and 73 on the 22nd. The birds involved in these arrivals behave very excitedly and feed voraciously, quite unlike the rather subdued residents.

As with Song Thrush there was evidence of a S.E. emigration occurring during August and September, quite distinct from the N.W. immigration of (presumably Continental) birds later in the year. For example six flew S.E. up the valley between the Observatory and One Tree Hill, with Song Thrushes, on August 26th, 1966, and also two flew high E. on September 28th, 1966, during a period of distinct nocturnal arrivals between September 27th and 30th.

There was evidence of a return Spring movement in 1965 only, with a series of nocturnal arrivals between March 18th and April 5th. During this period two flew high S.E. on March 25th.

At other times of the year the maximum monthly counts in the census area varied between 26 (January 1966) and 54 (July 1965, a successful breeding year).

Breeding: 49 breeding pairs in 1966 against 54 in 1965. As with Song Thrush, breeding success was poor for no apparent reason in 1966, and as a result numbers in the census area showed a marked decrease in the late summer compared with the previous year, for example in July the maximum count was 31 against 54 in 1965, and in August 29 against 45.

WHEATEAR: In 1965 singles on March 23rd (Blackheath) and March 10th, and in the autumn, two juveniles on August 25th. In 1966 a male on April 25th, and a juvenile on August 16th (Blackheath).

REDSTART: In 1965 single males on April 5th and 14th, two females arrived on May 3rd, and it was probably one of these birds which continued to be seen until May 7th. In the autumn singles were present on September 2nd, 6th, and 11th. In 1966 the only records were singles on April 23rd and August 23rd.

ROBIN: No evidence of migrational fluctuations during the survey; maximum monthly counts in the census area varied between eight and 15. *Breeding*: Sixteen pairs in 1965, 18 in 1966.

REED WARBLER: One May 10th, 1965 and May 11th, 1966, both by the Pond.

SEDGE WARBLER: Singing males on the 3rd, 10th and 16th May 1965, and April 26th, May 10th and 20th, 1966. All but the April bird were by the Pond.

BLACKCAP: In 1964 a male on October 6th.

In 1965 records of up to three between May 6th and July 17th probably all referred to residents. Outside this period singles on July 14th and 27th, and September 11th were thought to be migrants.

In 1966, "residents" were present from April 20th to July 7th, and outside this period there were isolated records of singles, probably migrants, on April 6th, August 17th, and September 9th, 23rd, 27th and 30th.

Breeding: In 1965 a pair was present throughout the breeding season in the Sanctuary 2 area, and song was heard on most visits between May 6th and July 15th. On May 28th the male was carrying nest material, but there was no evidence of successful breeding. A second male was present in Sanctuary 1 for most of the period, but was apparently not paired.

In 1966 two pairs frequented the Sanctuaries in the Wilderness, and successful breeding of one of these pairs was confirmed on June 25th, when a fully fledged juvenile was watched being fed. This juvenile, or possibly others, was present up to July 7th.

GARDEN WARBLER: In 1965 a "probable" on May 6th, and singles on the 8th and 11th. Early autumn migrants on July 24th and 30th, and in August ten bird/days between the 2nd and 13th.

In 1966, two on April 26th and one on August 8th were the only records.

WHITETHROAT: In 1965, 12 bird/days between May 2nd and 12th, with a peak of three on the 10th, and in the autumn five bird/days between August 23rd and 28th, with a straggler on September 11th.

In 1966, one April 28th, three May 3rd and two May 10th. In August singles on the 10th, 16th and 23rd, and in September two on the 9th and three on the 16th. The favourite area in the Park for this species is the double line of hawthorns below the Wolfe statue.

LESSER WHITETHROAT: In 1965 this species was recorded almost daily from May 3rd until the end of July, during which period all of the birds involved were probably those which bred or attempted breeding. Outside this period definite migrants were noted from August 3rd until September 12th, a total of 24 bird/days, with a maximum count of three on August 26th.

In 1966, only three individuals occurred, on April 22nd and August 11th and 23rd, and it was felt that in 1965 this species was exceptionally frequent.

Breeding: From the 15th May, 1965 a male was singing daily from a tall holly tree to the N.E. of the Pond. On the 23rd a pair was first noted here, and on the 26th a nest with three eggs was located beneath the song post. The nest site was in the shrubbery at the back of a flower bed in a much frequented public area. On the 28th the clutch of five eggs was complete, and the young hatched on the 9th June. However, the next day the nest was empty and it is not known what had caused the disappearance of the young, although squirrels were suspected.

On the 22nd June one of the pair was noted nearby giving an alarm note, and a second breeding attempt was suspected, but there was no further sign of either of the birds until July 15th, when the pair turned up unexpectedly in Sanctuary 2, about a hundred yards from the original nest-site, and they were watched here feeding a half-fledged juvenile. On July 26th what was presumed to be the whole family party of five were seen by the Pond.

At least two other singing males were present during May, but neither stayed for more than a week.

In 1966 there were no records during the breeding season.

WILLOW WARBLER: In both years this was the commonest warbler recorded in the Park, more frequent in autumn than in spring.

In 1965 spring passage was between April 7th and May 17th, a total of 93 bird/days with a maximum of ten on May 6th. Spring passage in 1966 was less spectacular, with only 23 bird/days between April 24th and May 24th with a maximum of three on May 12th.

Autumn migrants in 1965 totalled 208 bird/days between July 23rd and September 12th, with peaks on August 12th and 20th of 16 birds. In the autumn 1966, as might be expected after the small spring passage of the same year, numbers were much less than in 1965, a total of 64 bird/days between July 28th and September 14th, with a maximum of ten on August 12th.

Breeding: A male which sang from the topmost branch of an oak tree by the Pond from May 12th, 1965, moved its song-post to the

more suitable nesting cover of nearby Sanctuary 2 towards the end of the month. A female was not seen until June 1st, when the pair was seen carrying food into Sanctuary 2. The birds were watched back and a nest with six newly hatched young was located a few feet inside the fence in the S.E. corner of the Sanctuary. The young apparently fledged successfully, and the birds had all left the area by June 24th, when the male was last heard singing. There were no breeding season records in 1966.

CHIFFCHAFF: The tail-end of the autumn passage in 1964 involved a total of 15 individuals between September 29th and October 6th, six of which were present on September 30th.

In contrast with Willow Warbler, this species was more frequent in 1966 than in 1965.

In 1965 spring passage was between April 7th and May 14th, a total of only six bird/days, and in 1966 21 bird/days between March 28th and May 24th. In both autumns this was the first migrant to reappear, with passage in 1965 beginning in July when singles were present on the 8th, 9th and 13th. During August there was a total of ten bird/days, and the main passage occurred between September 1st and 27th, a total of 57 bird/days, with a peak of seven on the 24th. After this period singles were recorded on October 1st and 8th.

In 1966 the first autumn migrants were singles on July 7th and 22nd, and the main passage period was from July 28th until October 12th, a total of 97 bird/days, with a peak of ten on September 16th.

It was noted that the four individuals which occurred during the early part of July were adults (in very worn plumage), and it may be that their early passage was result of breeding failure.

WOOD WARBLER: On August 24th, 1965, one joined other *Phylloscopi* feeding in the bushes around the spring below the Wolfe statue. In 1966 there was one in the Gardens near the Pond on August 19th.

GOLDCREST: In 1964 singles on the 12th and 20th, and two on the 23rd October. In 1965 four on the 17th and one on the 25th October. The only spring records were in 1966, when up to two were present until April 3rd after an arrival on March 31st. In the autumn of 1966, the species was rather more frequent than in previous years with singles on September 29th and 30th, October 11th and 18th and November 8th, and two on October 24th.

SPOTTED FLYCATCHER: In 1965 first arrivals were on May 15th and after this date recorded almost daily until September 12th. Throughout this period it was impossible to say whether passage birds were involved. The highest count in the census area was never more than six, but during September up to ten were present in the Wilderness and this number included young birds bred in the area.

In 1966 up to six from May 22nd until August 31st. Outside this period singles on April 26th and September 9th and 29th were

certainly migrants. The gatherings in the Wilderness area recorded in September 1965 did not occur in the following year, perhaps due to a less successfully breeding season.

Breeding: Five or six pairs in 1965, six pairs in 1966.

PIED FLYCATCHER: Recorded in the autumn only, with seven bird/days in 1965 between September 4th and 14th, 1965, and only one record in 1966, a single on August 24th.

DUNNOCK: Outside September and October, maximum monthly counts in the census area varied between 12 and 21, the lower numbers occurring from November to February.

In all three years, mainly in September and October, series of interesting movements were recorded, often with a simultaneous increase in numbers much above the average counts in the census area, with a peak of 41 on October 19th, 1964. It is hoped to discuss these movements fully elsewhere.

Breeding: A notable increase from 18 pairs in 1965 to 25 pairs in 1966.

MEADOW PIPIT: In the autumn 1964, a S.E. passage of visible migrants on six dates from the end of September until October 4th, involving at least 17 individuals, and a N.W. movement of 16 on October 19th and one the next day. The directions of these movements suggested that two migrant populations may be involved, the earlier passage being British emigrants, and the later one of Continental birds wintering in Britain.

In 1965, however, there was not such clear cut evidence of this migratory pattern, although of a total of 21 visible migrants in September, 14 were moving between S. and N.E., and seven between S.W. and N. In October the only directional movements were two S. on the 19th and three S. on the 28th.

In 1966 the autumn movement gave the same impression as in 1964, with a total of 19 moving between S.W. and S.E. from September 14th to the 27th, and a total of 11 heading between W. and N. from September 29th to November 10th.

Spring migrants occurred in both years: in 1965 four N.W. on March 25th, and one S.W. on April 6th, and in addition two were down on Blackheath on April 8th, and on April 9th nine were feeding on the Rugby pitch in the Park in the evening after heavy rain had fallen during the day. In 1966 all spring movement was to the N.W., with a total of 42 individuals between March 14th and April 22nd. The peak movements of 15 on the 28th and 11 on the 29th coincided with heavy passage at Dungeness and Beachy Head, when immigrants were involved, probably returning British breeding birds.

TREE PIPIT: Spring and autumn passage birds noted in both years. In 1965 two were feeding near the Wolfe statue and one in the Ornamental Gardens on May 10th. In August two were feeding near

Wolfe on the 14th, and in September four flew N.W. on the 11th, and three more N.W. on the 12th.

In 1966 one on May 6th was the only spring record. One flew S.W. on August 30th, and two S. on September 9th.

PIED WAGTAIL: Recorded on Blackheath or in the Park in all months of the survey, at least one pair breeding successfully on Blackheath where juveniles were present in August 1965 and June 1966. An obvious influx from mid-September in both years, with the population remaining above average until February or March.

A favourite locality in the winter months is by the ponds on Blackheath, where a maximum of five were recorded. Visible migrants undoubtedly occur during late September and October, but these were often doubtfully separable from what appeared to be roosting flights of small numbers during the same period (S. or S.W. in the morning, N.E. in the evening).

GREY WAGTAIL: In 1964 a "probable" on October 20th, and one on the 23rd. Not seen in 1965. In September 1966 singles on the 1st (flying N.W.), 5th (by the Pond), and on the 30th (feeding by flood-water near One Tree Hill).

YELLOW WAGTAIL: Spring records in 1965 only when there was one on Blackheath on April 29th, and one flew W. on May 6th.

In the autumn a total of seven between August 12th and September 2nd, 1965, all flying over very high, the only two in visible range going N.W. In 1966 two on August 8th and a flock of five high N.W. on the 25th, and in September one on the 6th.

STARLING: The usual autumn W. or N.W. visible passage recorded from October 17th (1964) until November 29th (1966), with a maximum (probably exceptional) of 3,200 on October 19th, 1964, in one hour. Passage in 1965 was unusually light, being recorded on October 28th and 29th only, a total of 700 birds.

A cold weather movement during January 1966 when a mainly W. passage was noted on the 15th (380 birds), 18th (20) and 19th (416), and a return S.E. movement of 150 on the 25th.

Counts in the census area were only attempted twice, when there were 124 on April 21st, and 100 on May 17th, 1965. Highest numbers occur during October and November, and mid-February/March, when large feeding flocks can be seen in the Park, but in particular on Blackheath where a maximum of 1,500 was present on October 14th, 1964.

The high trees around the Pond and in the Wilderness are used as a staging point by birds on their way to roost in central London, and numbers involved in these flights reach a peak in November. On the 21st of that month in 1966, for example, 2,300 were counted leaving the Park in a N.W. direction between 15.15 and 16.00 hours. The return flight in the morning, in a S.E. direction, was also noted, but

the birds did not gather in flocks in the Park and thus the numbers involved appeared to be less spectacular than in the evening flights.

Breeding: The figure of 100 breeding pairs for each year is an absolute minimum. The numerous nest sites provided by the aged trees which abound in the Park made an accurate count impossible.

GREENFINCH: A fairly static population in the census area from April to August, up to 12 being present in these months. A much larger winter population begins to build up during September. A roost in the Rockery contained *c.* 25 birds on March 14th, 1966, and on this day (which was in no way exceptional for numbers of this species) the total population in the Park was in the region of 50 birds.

Visible passage recorded in the late autumn involved small numbers with no standard direction, suggesting local wanderings.

Breeding: In both years up to twelve singing males were present up to the middle of April, but numbers decreased sharply after this and in 1965 only four pairs stayed to breed, and in 1966 eight pairs. The favoured areas are the Rockery and the thick holly trees near the Pond.

GOLDFINCH:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1964:									0	36	0	0
1965:	0	0	0	11	35	0	6	22	2	15	0	0
1966:	4	3	0	10	9	0	9	9	5	30	7	0

The above table which gives the total bird/days for each month of of the survey shows well the period of spring and autumn passage through the Park. Directional movements were between W. and N.E. during the spring, mainly W., and between S. and E. in the autumn, mainly S.E. The directions involved thus suggest an emigration of British birds in the autumn and a return passage in the spring. The occurrences during January 1966 were a result of cold weather.

Breeding: In 1966 a family party of two adults and two juveniles was present on July 15th and may well have bred in the Park.

SISKIN: The only record is of a male which was picked up in weak condition during a snowstorm on April 14th, 1966, and later died.

LINNET:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1964:										14	(15)	0
1965:	0	0	0	36	33	0	1	1	4	1	0	0
1966:	6	0	6	11	17	0	1	1	7	2	2	0

The above table which gives the bird/day totals for each month, shows clearly the period of spring passage through the Park (mainly from the end of March to mid-May), and a smaller autumn movement during September and October. Outside this period the six for January 1966 were associated with cold weather, the July and August records probably referred to wanderers from local breeding populations, and the fifteen in November 1964 were feeding on Blackheath.

Of directional spring movements, involving 30 birds, 20 were moving between S. and W.S.W. and six between W. and W.N.W. In the autumn the only visible passage was 11 W. on October 20th, 1964, and a total of six S.E. during September 1966.

REDPOLL:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1964:										33	4	0
1965:	0	0	2	5	10	0	0	0	3	7	1	0
1966:	0	0	8	3	1	0	0	0	18	6	13	

The above table of total bird/days for each month clearly shows the periods of spring and autumn passage through the Park. Nearly all records referred to feeding birds, and the few occurrences of visible movements showed no standard direction in both seasons.

BULLFINCH: Present in very small numbers in all months except December, the maximum count in the census area being six on July 22nd, 1965, which included juveniles. Because of this resident population small numbers of migrants could pass through unnoticed, and the only direct evidence of migration was one flying high W. on October 24th, 1966.

Breeding: In both years two pairs were present during the breeding season, one in the Observatory enclosure, the other in the Wilderness. In each year at least one fully fledged juvenile was seen.

CROSSBILL: The Park had its fair share of the exceptional immigration during the late summer and autumn of 1966. A total of 31 individuals were recorded between July 12th and September 7th. Twenty-one of these flew off or were flying over in a N.W. direction. The dates of nearly all of the occurrences in the Park coincided remarkably with renewed influxes at Dungeness.

CHAFFINCH: Rather scarce outside the migration periods, numbers in the census area rarely exceeding three birds. There was no noticeable increase in the Park during the winter months.

In the autumn the usual N.W. or W. visible passage occurred annually within the period September 28th (1966) until November 11th (1966). Numbers involved rarely exceeded the rate of 30 birds per hour, and the peak figure of 450 in one hour on October 19th, 1964 was exceptional.

Comparatively small directional movements were noted in the spring in both years.

In 1965 nine flew high S.E. on March 17th, and on the 19th at least 20 were moving S.E. from bush to bush, feeding intermittently, up the valley between the Observatory and One Tree Hill, with a few Blue and Great Tits. In 1966, one flew off and headed high S.E. on February 15th, three flew N.W. on March 3rd, and one flew very high E. on March 22nd.

In addition to this direct evidence of a return spring passage, counts were often noticeably higher in the census area from the beginning of March until the first week of April in both years, with a continuous departure and arrival of new birds in small numbers almost daily.

Somewhat surprisingly this species was not involved in the cold weather movements at the beginning of January 1966.

Breeding: One, possibly two pairs during the breeding season in 1965, in the Rockery/Ranger's House area, and four pairs in 1966. No nests were found, or young seen, but the female of a pair which frequented the Reservoir during 1966 was giving an anxiety note as if young were present, on July 20th.

BRAMBLING: Recorded in 1964 six bird/days between October 13th and October 29th, and in addition 47 W. in one hour on October 19th, during the large immigration of that day, and two W. on October 21st. In 1965, singles on October 17th and 27th were the only records. In 1966, two on September 23rd appear to be the earliest recorded for the London area, after exceptionally early arrivals of this species on the East coast. The only other records were of one N.W. on October 21st, and two W. on November 8th. During cold weather in January 1966, six flew W. on the 15th, and with the arrival of milder weather, one flew E. on the 29th.

YELLOWHAMMER: Four records of singles, flying S.E. on November 6th, 1964, flying N.W. on March 19th, 1965, feeding below the Wolfe statue in the same month on the 30th, and one feeding in the same place on April 27th, 1966.

REED BUNTING: A female by the Pond on April 5th, 1965, and a male in the Ornamental Gardens on October 4th, 1966.

HOUSE SPARROW: Counts in the census area in October and November 1964 suggested a population of approximately 250 birds in that area. On April 21st, 1965 a similar count produced 167, and on May 17th, 1965 there were 178.

No obvious visible migrants were recorded, but roosting flights with Starlings often involved large numbers, particularly during October. That evening exodus was not as obvious as the morning return flight, when in rainy conditions large numbers would arrive from the N.W. and gather in the hawthorns around the Observatory and fly on in a S.E. direction.

Breeding: As with Starling an accurate count was almost impossible, and the figure of 150 breeding pairs for each year is an absolute minimum.

TREE SPARROW: Three flying high N.W. on March 30th, 1965, and one perched near the Observatory Garden on March 24th, 1966, were the only records.

Past Records

There has been no previous published work on the birds of the area covered by the present survey, of sufficient detail to make a thorough comparison worthwhile. In 1902, however, A. D. Webster, at that time the Park Superintendent, in his book *Greenwich Park—its History and Associations*, included a chapter relating his observations of the bird life of the Park for six years from 1896-1901. He gives no indication as to the methods which he used, and it is felt that any detailed comparison may be misleading, but his findings are summarized below purely for interest, and to illustrate the heartening fact that today the area can produce similar totals of both breeding and visiting species. The mention of some of the species breeding in the Park makes it obvious that the area must have retained much of its original heathland character at that time.

BREEDING SPECIES 1896-1901 (33)

Little Grebe	Blue Tit	Blackcap
Moorhen	Coal Tit	Whitethroat
Stock Dove	Nuthatch	Spotted Flycatcher
Wood Pigeon	Treecreeper	Dunnock
Turtle Dove	Wren	Pied Wagtail
Barn Owl	Mistle Thrush	Starling
*Green Woodpecker	Song Thrush	Greenfinch
Swallow	Blackbird	Linnet
*Carrion Crow	Robin	Bullfinch
Jackdaw	Reed Warbler	Corn Bunting
Great Tit	Sedge Warbler	House Sparrow

*Both Green Woodpecker and Carrion Crow had ceased to breed at the end of the period, which Webster considered to be due to the opening of the Park to the public.

VISITING SPECIES RECORDED 1896-1901 (47)

*Mallard	Kingfisher	Garden Warbler
*Teal	Lesser S. Woodpecker	Wood Warbler
*Sparrowhawk	Wryneck	Willow Warbler
*Kestrel	Skylark	Chiffchaff
**Partridge	House Martin	**Goldcrest
*Quail	*Sand Martin	Tree Pipit
**Corncrake	Hooded Crow	Grey Wagtail
Lapwing	Rook	Yellow Wagtail
Golden Plover	*Marsh Tit	**Hawfinch
**Woodcock	**Long t. Tit	Goldfinch
Black-backed Gull (<i>Sic</i>)	Fieldfare	Siskin
Sea Gull (<i>Sic</i>)	Redwing	Redpoll
Cuckoo	*Stonechat	*Crossbill
**Tawny Owl	Whinchat	Yellowhammer
*Nightjar	Redstart	Tree Sparrow
*Swift	**Nightingale	

** Seen only once. *Occasional visitors

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I am especially indebted to the Park Superintendent, Mr. J. A. Murray, for his interest and help during the survey, and for many valuable observations of the birds in the Park. Largely as a result of his keen interest in the wild-life of the Park many habitat improvements have been made which will greatly benefit the bird population in the future.

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The Return of The House Martin

By STANLEY CRAMP and JOHN GOODERS

Introduction

In the summer of 1966 a small colony of House Martins (*Delichon urbica*) was discovered in Harley Road, near Primrose Hill. This is the first recorded nesting of the species in Inner London since the disappearance of a colony at Westbourne Grove, Bayswater was reported in 1889 (Fitter 1949). It seems worthwhile, especially in view of the suggestion that the reduced air pollution in Inner London might be more favourable to insectivorous species (Cramp and Tomlins 1966), to examine whether this nesting at Primrose Hill was a reflection of a general increase in the inner districts of London in recent years.

Results

No fully detailed history of the House Martin and its breeding since the war can be attempted because of the reluctance of most observers to submit records of the nesting of common or relatively common species, especially of those in suburban areas. Fortunately, however, a survey of the inner breeding limits of the House Martin and Swift (*Apus apus*) was undertaken in 1965 and 1966 (by J.G.) while a sample census of these species carried out in 1949 (Cramp 1951) gave useful data for one of the key areas in the south-west.

This south-west area had the greatest density of breeding House Martins of any of the areas covered in 1949 (which included Inner London and three sample areas covering the inner suburbs, outer suburbs and the outskirts). They were then in three main groups, at Barnes (30 nests) Putney (15 nests) and Hammersmith (5 nests), with four more isolated nests in Barnes. By 1966 the Hammersmith colony had grown markedly, with 15-30 nests in the original area, west of Hammersmith Bridge, and 6 to the east of the bridge, whilst in the east also there had been a further extension to the Fulham Palace Road area, with 24 nests in scattered groups. The extension east of the bridge appears to have begun about 1952 and numbers have grown slowly since then. Thus Hammersmith and Fulham held 45-60 nests in 1966 compared with 5 in 1949 and they were spread over a much wider area. Just to the north, however, in Shepherd's Bush the position is more obscure. A colony which existed in 1944 was deserted in 1945 and 1946, but 15 nests were found at almost the same site in 1958 since when there have been no records. In the south-west south of the river there appears to have been little change in numbers at Barnes since 1949, but in Putney two small colonies by the Thames found after the 1966 breeding season represent a probable recent increase.

The other area where House Martins are found nesting nearest to the centre is in the north-west and north, where the historical picture is a little

fuller. In Hampstead the last breeding records were in 1944, with negative reports in 1945 to 1947, and with a declining population recorded at Finchley, a little further out, in 1947, the species seemed doomed in this area. In 1952 however, 2 nests were found on the south-eastern edge of Hampstead Heath near Highgate Ponds. In 1953 two more nests were found not far away and this colony increased to 7 nests in 1954 and 1955, and to 9 in 1956. The survey in 1965 and 1966 reported 7 different colonies in the Hampstead area, totalling about 36 nests, and including, as already mentioned, a southward extension to Primrose Hill, just within the boundary of Inner London. Eastwards, there was a nest at Junction Road, Islington in 1966. Further east, in Stoke Newington, a substantial colony was found in 1956, and estimated at 30+ nests in 1958. Nests were reported in the area in 1962 and 1965, but no full counts were made; a check in June 1967 revealed at least 27 nests, suggesting that there had been little change in recent years.

Elsewhere there does not seem to be any indication of any clear increase in recent years and the species occurs in smaller numbers. The small colony in Kingston Vale was said to consist of two pairs in 1941, an unknown number nested there in 1946 and from 1961 to 1966 numbers were

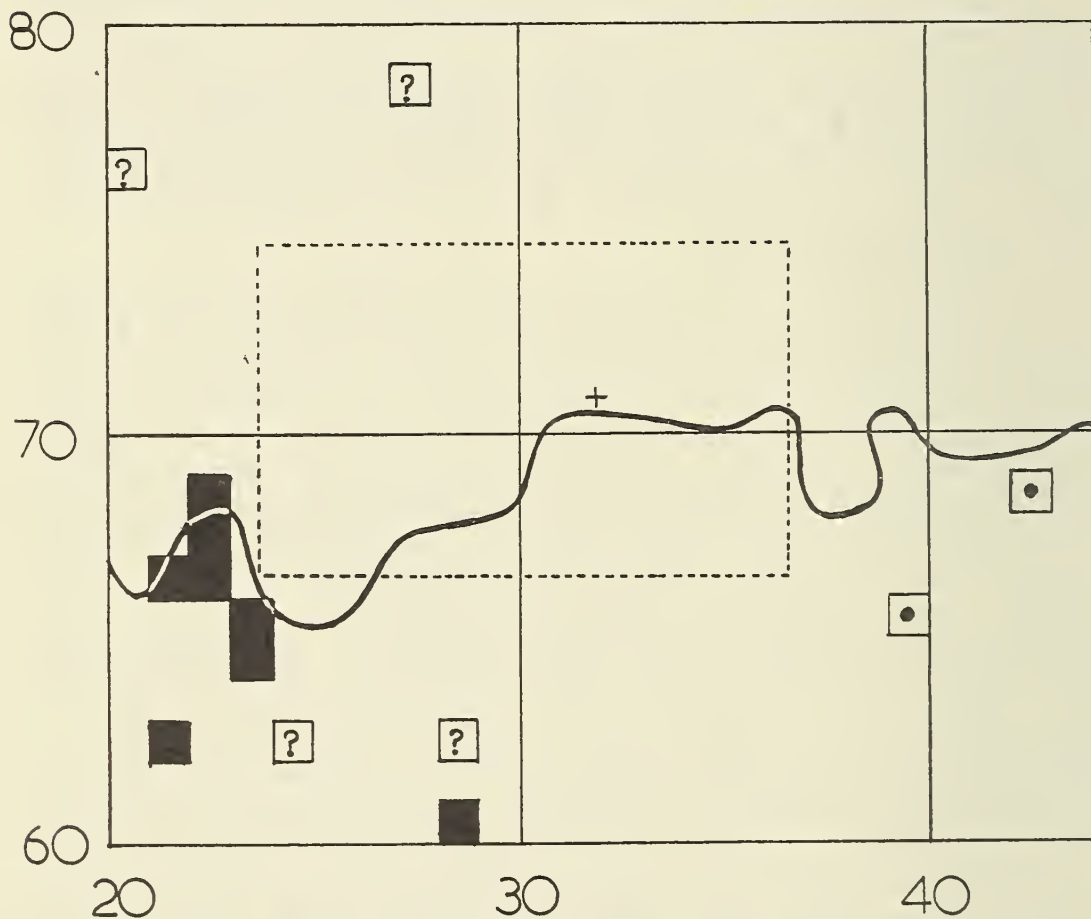


FIG. I. Breeding distribution of House Martins (*Delichon urbica*) in Central London 1945-1949. Black squares indicate breeding, squares with dots probable breeding, and question marks possible breeding. Inner London area shown by dotted lines.

usually between 5 and 7 pairs, with 12 or 13 reported in 1964. Further east in the Tooting and Streatham districts there have been small scattered colonies since at least 1949 and although more were recorded in 1965 and 1966 this may well have been due to more adequate coverage rather than any real increase; in any case, total numbers even then are unlikely to have exceeded a dozen or so pairs. In Kent again small colonies have been known for some years (e.g. in Woolwich in 1950 and at Blackheath in 1954 and probably earlier) but records are few and there is nothing to suggest any change in recent years. The east of the area remains largely a blank, with the only recorded colony at Wanstead Flats in 1956; this part was not covered in the 1965-66 survey.

Discussion

Up to about 1950 the general picture was of the House Martin slowly retreating from the inner districts of London (Homes *et al.*, 1957). Since then there has been a definite increase and spread in the south-west, especially at Hammersmith, and a return followed by an increase and spread in the north-west around Hampstead. In the north, at Stoke Newington, the position is more uncertain; but the records suggest an

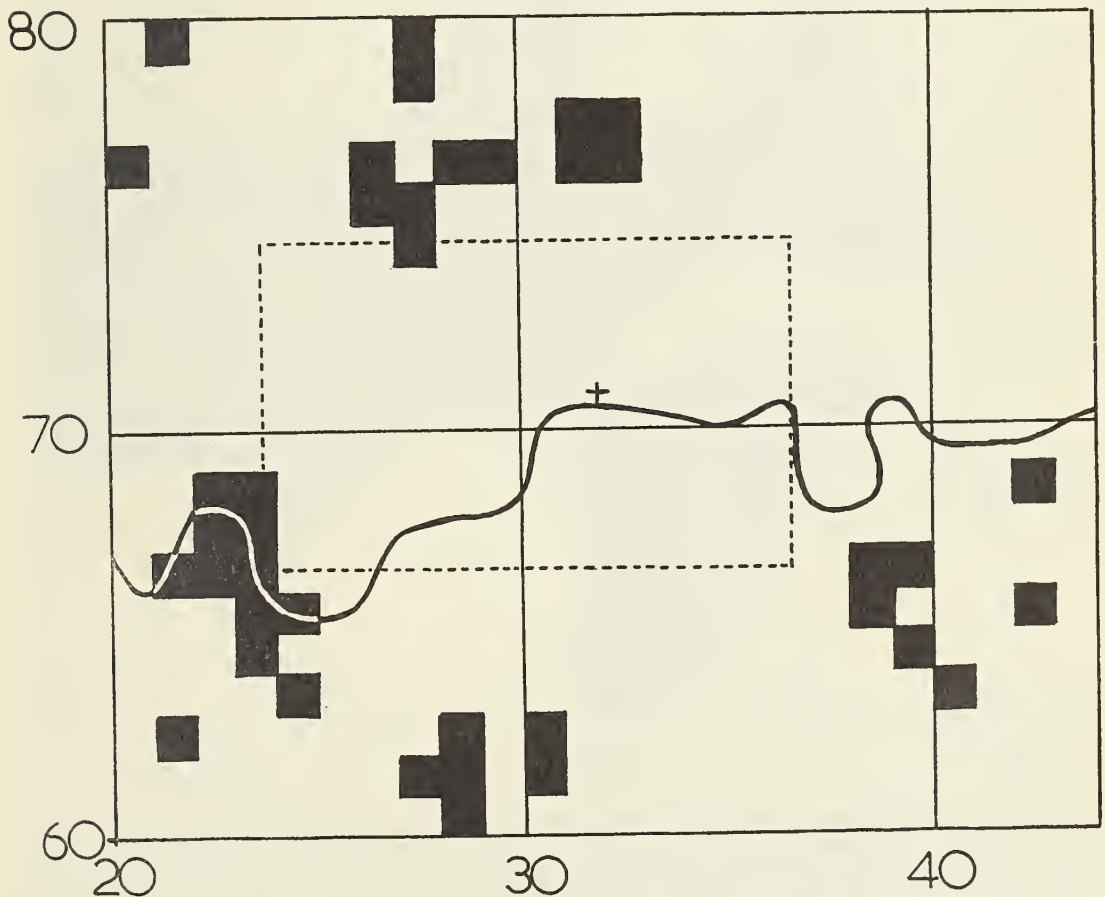


FIG. II. Breeding distribution of House Martin (*Delichon urbica*) in Central London 1960-1966. Black squares indicate breeding.

increase in the 1950s, which has since been maintained. In the south and south-east there is no evidence of any marked recent change, while in the east there are few records of any kind since the war. (See Figs. 1 and 2).

The House Martin requires flying insect food and mud for nesting. Insects are usually found above or near water and some, but by no means all, water areas furnish supplies of mud. It seems no accident therefore that the main nesting areas of the species in the inner zone of London are in the south-west, with its tidal Thames and reservoirs, and the north-west, with the shallow lakes of Hampstead and Highgate. The Stoke Newington colonies in the north are also near reservoirs and park lakes. The south and south-east have many fewer suitable waters. The east, with the Thames and the Lea, as well as other waters, has unfortunately been inadequately covered. The increase and spread in recent years in the numbers of nesting House Martins cannot, however, be due to any marked changes in the area of water or supplies of mud for nesting. Indeed the only known new local factor is the lessened air pollution which may have

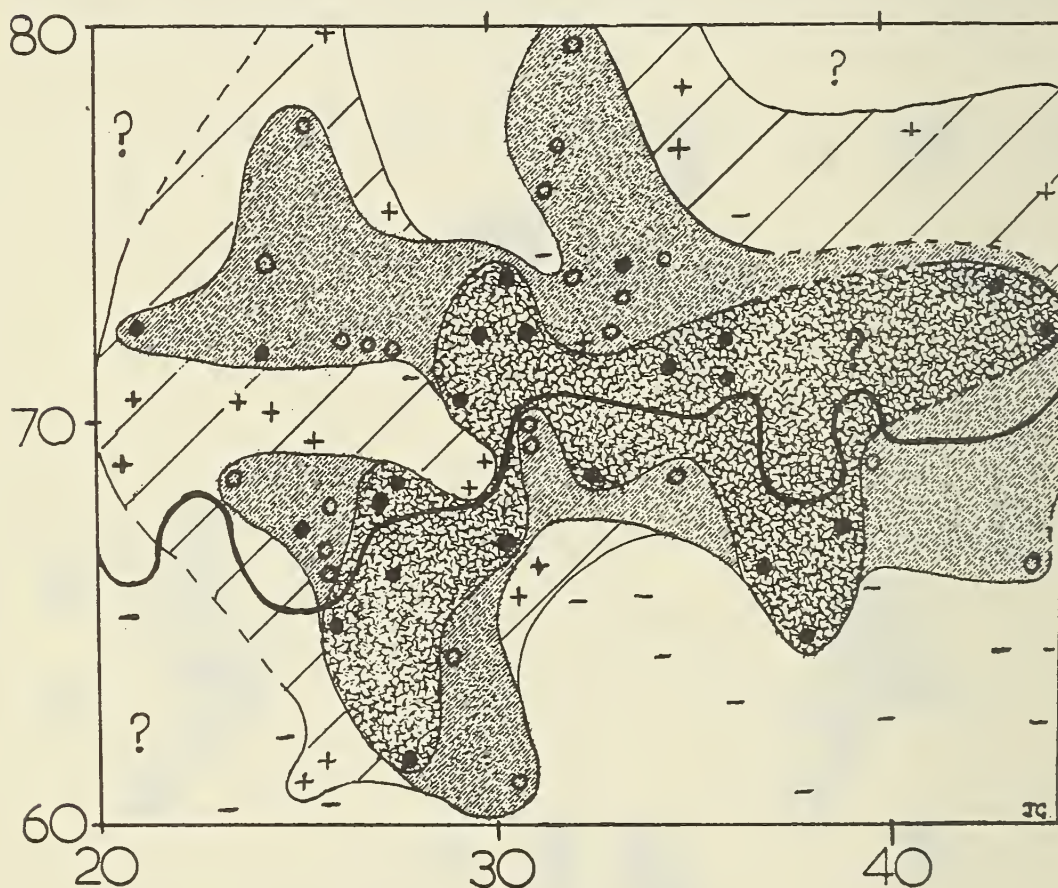


FIG. III. Smoke concentration in microgrammes per cu. metre (mg/m^3) in summer months 1964, Central London. Sites are marked as follows: filled in circle 50 and over mg/m^3 ; open circle 40-49 mg/m^3 ; plus sign 30-39 mg/m^3 ; minus sign less than 30 mg/m^3 . The broken stippling represents the heaviest 50 + pollution, the crowded hatching the 40-49 zone, the open diagonal shading the 30-39 zone, and the open area the lowest pollution.

led to an increase in the number of flying insects. This improvement is confined to smoke pollution which in London is estimated to have dropped by about two-thirds between 1952 and 1965, while the concentration of sulphur dioxide, mainly from electric power stations, has changed little in this period. (Craxford, Clifton and Weatherley, 1966).

The marked increase in the number of stations recording air pollution in recent years makes it possible to give a fairly detailed picture of the degree of smoke pollution over much of the inner area of London. Fig. 3 shows the summer average (April-September) of smoke concentration in 1964, taken from the annual summary prepared by the Warren Spring Laboratory of the Ministry of Technology. The areas of four main degrees of smoke concentration have been marked, but owing to incomplete cover and often quite marked local variations these boundaries must be regarded as approximate. Nevertheless a comparison of Figs. 2 and 3 shows that the heaviest density of breeding House Martins in the south-west in recent years was found either in or adjoining the zones of lowest smoke concentration (less than 30 microgrammes per cubic metre). The north-west colonies were either in this zone or in the very slightly more polluted air of Hampstead (31 mg.). The Stoke Newington group and the small scattered colonies were in the zones with concentrations of 40-49 mg., though in each case quite close to less polluted districts. No nests at all were reported between 1960 and 1966 in the zones of heaviest pollution (over 50 mg.), although some parts of these had considerable areas of water. Thus there appears to be a reasonable association between the breeding distribution of the House Martin and the degree of smoke concentration, especially when regard is paid also to the two other important factors, the presence of water and mud.

The most likely assumption is therefore that the increase and spread of breeding House Martins in the areas adjoining central London in recent years is linked with the decrease in smoke concentration and a consequent increase in flying insects. This cannot be proved, however, as there appear to be no available figures to show whether the numbers of flying insects have increased or not.

It is hoped to continue this survey and we should be most grateful for any additional records of House Martins breeding in the period 1945 to 1966, and for the numbers of nests found at all colonies in the inner area in future, especially any new colonies.

Acknowledgements

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Committee to use these. Finally, we would wish to thank the Ministry of Technology for permission to make use of the Air Pollution Abstracts.

Summary

The records of House Martins breeding in the inner areas of London since the war show an increase in numbers in the south-west (Hammersmith) and a return, followed by an increase and spread, in the north-west (Hampstead). In the south and south-east there is no indication of any marked change whilst elsewhere records are too few to assess the position.

It seems likely that the increases are linked with reduced smoke concentrations in the inner areas of London in recent years. There is some evidence of an association between the breeding distribution in recent years and the degree of smoke concentration, especially when regard is paid to other important factors—the presence of water and mud. Reduced smoke concentration has presumably led to an increase in the numbers of flying insects available as food, but no numerical data are known on this aspect.

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Book Reviews

WHERE TO WATCH BIRDS. John Gooders. *André Deutsch*. London, 1967.
313 pages with maps and 12 photographic plates. Price 30s.

With the ever-growing number of birdwatchers and their increasing mobility there was bound to come a demand for guides who would know where the birds are and how the watchers could best see them. Fitter in his *Guide to Bird Watching* and Fisher in the *Shell Nature Lovers Atlas* have recently gone some of the way towards putting the one in sight of the other. Now John Gooders has squarely faced up to the question "where can I see birds?" and given the answer the full treatment. This is primarily a book about places and it is tightly packed with essentials for the keen traveller after birds.

The book covers England, Wales and Scotland including the Hebrides and Orkney and Shetland Islands. Counties are arranged alphabetically, either individually or in groups, as are places within them. County chapters open with information on local societies and continue with the good bird areas. These are naturally selective and readers may find some favourite spots omitted. Nevertheless over 500 places are described with the detail necessary to plan a visit. These areas vary in size from entire islands to pools of a few acres. The information in every case follows a consistent pattern starting with the Ordnance Survey map number and the High Tide factor where appropriate. There follows a description of the habitat, general remarks about the birds and what especially to look for and at what season and finally ways and means of getting there including comprehensive road references. Restrictions when they exist are clearly set out and where permits are obligatory the address at which to apply is given.

The twenty-seven maps which show approach roads and routes to the best bird haunts in the areas depicted are extremely useful and one can only regret that space and cost are probably the reason why there are not more of them. The 12 plates are for the most part aerial views of wetland habitats. Their small size on the page reduces detail and thereby makes them the least successful feature in a book otherwise so explicit.

For the London birdwatcher there are many areas listed that can be reached in an easy day's birding and the fund of information will keep him happily circumnavigating the capital on many a weekend. As an example there are four places where, with luck, John Gooders says he might see a wintering Great Grey Shrike, a regular rarity. But nowhere is the Wryneck listed. It is the policy of the author to clamp a security curtain on species teetering on the edge of the population threshold and he recognizes the danger inherent in a book of this nature, namely that it can add to the pressures already bearing on many species and so make conservation that much more difficult.

Birds, bird haunts and birdwatchers are the ingredients of a dynamic pastime that is free for all. The hope is that greater knowledge will lead to better preservation—or will it? John Gooders, whom we know so well in this Society as an indefatigable supporter of conservation, himself asks that his readers should be active in the positive protection of the birds they go to watch in the places he and his many helpers have so ably described.

L.B.

THE SHELL BIRD BOOK. James Fisher. *Ebury Press and Michael Joseph*. Ill. 25s.

In this book James Fisher has gathered together a wealth of information not readily available to ornithologists. It ranges from palaeontology to birds in literature, music and art; lists bird watchers from the 6th to the 20th century and birds from 600,000 B.C. to the present day; gives a guide to Birds Provinces including organizations, books and bird reserves; has a chapter on bird protection and one on bird gardening; discusses the naming of birds and how to record them, their pattern of distribution, their song and migration. Inevitably in covering such a wide field the book has much of the character of a series of essays and makes interesting general reading although the style of writing is at times unusual. However many ornithologists may well find it of value as a quick source of information and as a lead in for lines of study for which much deeper enquiry would be necessary. The chapters on Bird Song and Migration are historical and descriptive of organization and method rather than summaries of scientific knowledge in these fields.

James Fisher deplores the lack of bird palaeontology among the younger ornithologists. He refers to the good work being done in America in this field, and points the way to an interesting and valuable field of study obviously being neglected at the moment.

The book is profusely illustrated both in colour and black and white. Dr. Ennion has provided charming colour illustrations of 48 species of British birds, there are colour pictures of some bird reserves and black and white reproductions from as early as Saxon times and including some of Bewick's delightful woodcuts and there are maps and diagrams.

E.P.B.

LONGMANS BIRDS. Eight Booklets by Humphrey M. Dobinson, illustrated by Robert Gillmor. *Longmans Green & Co. Ltd.* 2s. each or 15s. the set.

The eight little books in this Series, written by Humphrey M. Dobinson and well illustrated by Robert Gillmor, are very pleasing in appearance and whilst intended for young readers maintain a high standard of scientific accuracy. The species featured in the books are Blue Tit, Chaffinch, Robin, Swallow, House Sparrow, Song Thrush, Collared Dove, and Black-headed Gull. Each volume gives us the main characteristics of each species, together with a good deal of information on nesting and other behaviour. A particularly useful feature is a double page of illustrations of species liable

to be confused with the bird in question, and so the series gives a beginner a good start in the difficult job of identifying the birds he sees. At the end of each volume there is a list of "things to do", which provides a good groundwork in the training of a young naturalist. For example, the feeding habits of Blue Tits, the invasion of Western Europe by the Collared Dove, the roosting of Gulls, and the flight of Swallows all form subjects for study, and there are many practical hints, and details of publications and Societies for young people. It is hard to find any fault in these books, except for the occasional slightly inaccurate colouring, and it is to be hoped that author, artist and publisher co-operate again soon to give us new titles, for example a Duck, a Wader, a Bird of Prey, or a Warbler.

A.J.H.

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Instructions for Contributors of Papers

Papers concerning the ornithology of the London Area should be submitted to Miss E. P. Brown, 58 Ladbroke Grove, London, W.11, not later than the end of January if they are to be considered for publication in the same year, but it would be of assistance if details could be given in advance. They should be typed if possible with double spacing and a wide margin, on one side only of quarto paper.

Scientific names should be underlined, but not headings or sub-headings. References should be listed at the end, in alphabetical order of author's names, in the following standard form:—

LACK, D. (1953). *Life of the Robin*. London.

MEADOWS, B. S. (1961). The Gull Roosts of the Lea Valley Reservoirs. *London Bird Report*, 25 for 1960, 56-60.

The corresponding references in the text would be (Lack, 1953) and (Meadows, 1961).

Line drawings should be submitted separately, in Indian ink on thick white paper or card, preferably 2 × or 3 × the size finally intended. Any lettering must be large enough to be clear when reduced, and all lines must be solid black, not pale or imperfect. Legends should be typed separately as they will be set up by the printer.

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